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THE CHEMIST AND DRUGGIST

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NEW WORLD ISSUE.

The Issue of "The Chemist and Druggist" for May 19 will, in addition to the large weekly circulation, be addressed to the Chief Buyers of Chemicals and Druggists' Goods in Canada, United States, South America, and the West Indies, thus **Tapping Millions for British Export Trade.**

For particulars in regard to it, advertisers should address the Publisher, at 42 Cannon Street, London, E.C.

Summary.

THIS COLONIAL ISSUE of the C. & D. is Colonial in character, and contains a budget of business information which should enable Colonial and Indian buyers to add freshness to their next indents.

SOME CHEMISTS AT HOME may know one or other of the group of Anglo-Australian chemists of the 'fifties which is printed on p. 634, and facing it are notes on the varied personalities. On the latter page also we print pictures of a new potato ("Gem of the South"), which has been produced by a Tasmanian chemist in his spare hours. It breaks the world's record in reproductiveness (p. 635).

COLONIAL PHARMACIES are as a rule quite homelike in character, but there are points of difference. We give a group on p. 637 embodying Canadian, West Indian, and South African. With reference to pharmacy in the last-named dependency readers will be interested in a chemist's account of it printed on p. 672, and Messrs. Oppenheimers' traveller sends some photographs of Rhodesian cultures which are reproduced on p. 673.

FROM INDIA AND THE EAST comes to us this week a budget of news and pictures, the latter embracing chemists' views of the visit of the Prince and Princess of Wales to Karachi. We have also an account of pharmacy in Japan (*i.e.* Japanese pharmacy), written by one who is in it.

OUR SUBSCRIBERS will find this issue to be rich in business possibilities, as we describe many of the latest things offered to the trade by business houses. See, for example, the reports by Our Town Traveller and a lengthy series of Trade Notes. We have also gathered some items at two exhibitions which have been held in London this week.

THE Sixth International Congress of Applied Chemistry was opened at Rome this week. The Hon. President is Professor Cannizzaro, of whom an autograph portrait is printed on p. 633.

AN ANTI-BOOTS BILL has been prepared by the Standard Tablet Co., and is reproduced in our correspondence section. It is for sticking on chemists' windows. Mr. Boot is one of the many correspondents who write on this subject and the Pharmacy Bill, but we have not been able to get in all letters received, as some were delivered after the pages closed for press (p. 674).

MR. J. E. RICHARDSON, a well-known and much-respected Isle of Wight chemist, has died in tragic circumstances (p. 625). Our obituary columns on p. 650 also record the deaths of several well-known men—*e.g.*, Mr. E. N. Butt (London) and Mr. James Townsend (Exeter).

THERE WAS AN ATTEMPT at the Chemical Section of the London Chamber of Commerce to get a motion passed recommending that the Poisons and Pharmacy Bill should apply to Ireland. The movers were members connected with the agricultural and horticultural poisons trade, and after lengthy discussion the meeting was adjourned (p. 669).

CASTOR OIL, coco-nut oil, bayberry-bark, English regulus, antimony, and sugar of lead are higher. Jamaica ginger is lower. A large auction of drugs has been held this week, and is fully reported on p. 655.

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, PH.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

All communications and reports must bear the names and addresses of the writers, not necessarily for publication. The reports of those who ignore this rule are liable not to be dealt with.

REPORTS.

THE powder distributed to students on March 28 consisted of equal parts by weight of lead hydroxycarbonate (white-lead), ferrous oxalate, and diammonium hydrogen phosphate. The calculated composition of such a mixture is:

Pb	...	...	...	...	26.7
Fe	...	...	...	...	10.4
NH ₄	...	...	...	...	9.1
CO ₂	...	...	...	...	5.2
C ₂ O ₄	...	...	...	...	16.3
PO ₄	...	...	...	...	23.9
H	...	...	...	...	0.2
OH	...	...	...	...	1.5
H ₂ O	...	...	...	...	6.7
					100.0

The only noteworthy impurities present were traces of calcium and magnesium.

Samples of the powder were distributed to 82 students, and 25 reports were sent in for examination. All of our correspondents were successful in detecting iron and ammonium, but six failed to note the presence of lead. The failures in the detection of the several acid radicals were: Carbonic, 8; oxalic, 6; phosphoric, 1.

The analysis this month was comparatively simple, and the proportion of high scores is, consequently, greater than usual. Although both the phosphoric and oxalic radicals were present, these did not cause any serious complication; but a routine phosphate separation was, nevertheless, unavoidable in order to make quite sure of the presence or absence of barium-group metals and of magnesium. In carrying out the phosphate separation, several correspondents added sodium or ammonium phosphate, along with sodium or ammonium acetate and acetic acid, at the stage where ferric and aluminium phosphates are to be precipitated. This is a procedure which might occasionally be of some service if applied (for the sake of the information obtainable by means of it) to a small portion of the solution, but as a general practice, and used without discrimination, it is not a satisfactory innovation. In the present instance it was worse than useless, since the solution already contained phosphoric radical largely in excess of all the iron present, and the further addition of this radical only necessitated its removal again by further adding ferric chloride. Apparently, the test is one which (like many others) is often applied without its purport and limitations being properly understood.

The failures to detect lead are all to be attributed to one and the same cause—viz., the addition of hydrogen sulphide to solutions containing so large a proportion of free hydrochloric acid that no precipitate of lead sulphide could be formed. The necessity of diluting largely, prior to the treatment of a strongly acid solution with hydrogen sulphide, is one of those points to which students generally, and beginners in particular, do not themselves properly attend, and to which their attention does not appear to be directed with sufficiently persistent reiteration; and serious results follow from omitting to attend to it. It is not difficult to understand how puzzling some of the effects must be which appear in the iron group, and are due solely to

lead of which no indication has been obtained up to that point.

The proportion of the carbonic radical present in the powder was not large, but still it was too considerable to be overlooked in a careful analysis. Those of our correspondents who failed to detect it would do well to practise upon mixtures of their own making which contain 5 per cent. and less of this radical. Practising in this way on mixtures prepared by themselves is a direction in which many students might greatly increase the usefulness of their examination of the mixtures proposed for analysis in connection with this column.

The traces of calcium and of magnesium present in the powder were slight, but unmistakable evidence of their presence was obtainable after a complete separation of the phosphoric radical had been effected.

Traces of the sulphuric and hydrochloric radicals were reported by a good many students. These appear in most cases to have been impurities in the sodium carbonate employed in preparing the solution to be tested for acid radicals; because, when a portion of the original powder was dissolved in dilute nitric acid, the solution did not yield any precipitate, even on standing, either with silver nitrate or with barium nitrate.

PRIZES.

The First Prize for the best analysis has been awarded to L. C. WOOLLDRIDGE, 16 The Square, R.N. Hospital, Plymouth.

The Second Prize has been awarded to A. F. WAKELIN, The Cedars, Maney, Sutton Coldfield.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book or books they select.

MARKS AWARDED FOR ANALYSES.

1. Correspondents who are unqualified:

L. C. Wooldridge (1st Prize)	...	98	Keiro	...	...	95
A. F. Wakelin (2nd Prize)	...	97	Craven	...	...	82
T. P. Noble	...	96	Mac	...	...	79
A. D. N.	...	96	Brid	...	...	78
V. L. B.	...	95	Linnett	...	...	71
Chloroform	...	95	Oxton	...	...	70
J. E. B.	...	95	Pluto	...	...	66
Krypton	...	95	Nemo	...	...	65
Reldas	...	95	Cruce Vinco	...	...	61
The Owl	...	95	Miss Ferri	...	...	51
	...	95	R. D.	...	...	51

2 Correspondents who are qualified, or who have not indicated that they are unqualified:

Chemicus	...	82	Ooma	...	...	98
C. G.	...	84	C. W. Roberts	...	...	65

TO CORRESPONDENTS.

T. P. NOBLE.—It is not quite clear, from your report, that you converted the iron completely into ferric salt prior to precipitating with ammonium chloride and ammonia. The formation of a white precipitate by calcium chloride in an acetic-acid solution indicated the presence of oxalate but not of phosphate, calcium phosphate being soluble in acetic acid.

A. D. N.—Too many of your tests, which should have been applied in the course of a routine analysis, were applied simply to your original solution. Misleading results and inaccurate conclusions often arise from this cause, although you have been fortunate enough to escape these on this occasion.

J. E. B.—Apparently you failed to effect complete precipitation of the iron by means of ammonium chloride and ammonia, through omitting to convert it into ferric salt; in any case, you should not have had iron present in the filtrate from these reagents.

KRYPTON.—Distinct evidence of the evolution of water was obtained when the powder was heated in a dry tube. Water formed from the decomposition of the lead hydroxycarbonate and of the ammonium phosphate, as well as water of crystallisation, contributed to this result.

THE OWL.—Mere evaporation of a solution to dryness is not sufficient to destroy organic matter; ignition of the solid residue is also necessary.

KEIRO.—You appear to suppose that chromic hydroxide would be left undissolved when an iron-group hydroxide precipitate is treated with solution of sodium hydroxide. This is not so, however, as chromic hydroxide is readily dissolved by a cold solution of sodium hydroxide.

MAC.—We fail to grasp what you are driving at when you write "To solution from NH_4OH group added NH_4Cl in excess and boiled. No ppt. Absence of aluminium." Had aluminium been present in the powder, it ought to have been removed in the ammonia precipitate. Did you really expect to obtain a precipitate of magnesium hydroxycarbonate on adding magnesium sulphate to the original solution containing hydrochloric acid? The precipitate which you did obtain consisted of lead sulphate, and it did not indicate the presence of a carbonate in the powder.

LINETT.—You do not give enough detail regarding your work to show whether it has been properly carried out or not. It is not sufficient to say about a precipitate "Lead: no other metal proved to be present," etc.

OXTON.—Your original solution must have contained much too concentrated hydrochloric acid, since it did not yield lead sulphide on passing hydrogen sulphide. Probably it was the lead left in solution which led you to conclude, later, that cerium and aluminium were present.

PLUTO.—"Dissolved," not "solved," is the word usually employed. The precipitate which you mistook for silver chloride consisted of silver oxalate—the latter being somewhat sparingly soluble in dilute nitric acid. See also first sentence of reply to "Oxton."

NEMO.—You concluded too hastily that the powder contained mercury, and you do not appear to have employed any confirmatory tests. Your failure to detect lead points the need of more attentive care in observing reactions and drawing conclusions from the observations.

CRUCE VINCO.—It is a very unsatisfactory proceeding to dip a platinum wire into hydrochloric acid and then into a powder under analysis, since contamination of the powder with the acid is almost unavoidable. Why not mix a minute quantity of the powder with hydrochloric acid on a watch-glass and dip the wire into the mixture? See also the first sentence of the reply to "Oxton."

MISS FEREL.—The supposed aluminium hydroxide was probably silicic acid from the sodium hydroxide used. We are unable to trace the origin of the supposed zinc or the final fate of the real lead.

R. D.—Your failure to detect the phosphoric radical may have been due to some defect in your ammonium-molybdate solution, or in your mode of using it. Test your solution with a known solution of a phosphate.

CHEMICS.—Calcium chloride could not give a precipitate of calcium oxalate in the original hydrochloric-acid solution, since calcium oxalate is soluble in hydrochloric acid.

C. W. ROBERTS.—See the first sentence of the reply to "Oxton."

ALUMS.—Your last month's report must have got detached from the slip bearing your name and address between the time it left you and the time its turn came for being read. It has now been read and 92 marks have been awarded.

THE ANALYTICAL TOURNAMENT.

At the beginning of the winter session we offered a *First Prize* of books, value 2l. 2s., and a certificate to the competitor who obtained the highest aggregate marks in the six monthly analyses from November 1905 to April 1906; a *Second Prize* of books, value 1l. 1s., and a certificate to the competitor who obtained the second highest aggregate; and a *Third Prize* of any two books published by **THE CHEMIST AND DRUGGIST** and a certificate to the competitor who gained the third highest aggregate. The tournament closes with the analysis reported upon this month, and a comparison of the aggregates enables us to decide upon the prize-winners. Altogether, 102 students took part in the competition, and month by month a number of intelligent and meritorious reports were sent in from all parts of the country. The standard of excellence attained (as indicated by the aggregate marks obtained) is higher, this winter than in the tournament of last winter, but the higher aggregates may also be due in part to a slightly lower degree of difficulty in the exercises set. It is gratifying to note a considerable increase in the proportion of competitors who sent in reports for each of the six months of the tournament.

The first place in the tournament has been taken by "L. C. W." (Mr. L. C. Woollidge, R.N. Hospital, Ply-

mouth), with an aggregate of 561 marks, a total made up with most creditable steadiness of 94, 97, 94, 83, 95, and 98, and to him the first prize has been awarded.

The second place and prize have been taken by "Ooma" (Mr. Henry Dryerre, The Pharmacy, Bonnyrigg), with an aggregate of 537 marks, also made up with praiseworthy steadiness of 80, 86, 95, 84, 94, and 98.

The third place and prize have been taken by "Craven" (Mr. Charles F. Smith, c/o Nuthall & Mason, Bank Place, Norwich), with an aggregate of 525, made up of 95, 78, 91, 85, 94, and 82.

To the prize-winners named above we offer our hearty congratulations on the results of their sustained efforts throughout the winter, and we shall be pleased to hear from them as to the books they desire as prizes.

English News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

The Warrington Co-operative Society have decided to support the action of the Wholesale Co-operative Society with regard to the sale of proprietary articles.

The Southwark Borough Council are to call a conference of all the Metropolitan Borough Councils to consider the whole question of the adulteration of food and drugs.

The Executive of the British Pharmaceutical Conference met in London on Tuesday, when Messrs. Alcock, Barclay, Gerrard, and Thompson reported further on the Birmingham arrangements.

At the Northumberland Licensing Sessions on April 18, Mr. A. G. Marshall, chemist and druggist, of Bridge Street, Morpeth, was refused confirmation of an off wine-licence granted by the local Magistrates.

The British Turpentine Corporation, Ltd., of 75 Coleman Street, London, E.C., were summoned at Woolwich Police Court on April 25 for retaining a building in Charlton without having obtained the approval required under the London Building Act, 1894. The summons was dismissed, but the hearing of a charge "of carrying on a dangerous trade" was adjourned for six weeks.

Among the portraits at the Summer Exhibition in the New Gallery, Regent Street, London, which opened on Monday, are those of Sir William Huggins (by the Hon. John Collier) and Mr. Howell Idris, M.P., in his robes of office as Mayor of St. Pancras (by Mr. J. Coutts Michie, A.R.S.A., the brother of a well-known Kentish Town chemist). The exhibition also contains in the Central Hall a bust by Mr. Alexander Zeitlin of the Right Hon. Walter Vaughan Morgan, Lord Mayor of London.

Drugs in the City.

In the annual report of the medical officer of health for the City of London, which has just been circulated, Dr. Collingridge says that during the twelve months sixty-one samples of drugs were examined under the Sale of Food and Drugs Acts. Of these, five, or 8.2 per cent., were found to be adulterated. Proceedings were taken against the vendors of sweet spirit of nitre, deficient in ethyl nitrite to the extent of 33 per cent. and 71 per cent. respectively, and fines were imposed of 10s. and 2l., with 17s. 6d. costs in each case. The three other vendors were cautioned. Last year the percentage of adulterated drugs was 7.7, and it was regrettable to find no improvement this year. It is true, the report continued, that with regard to this form of adulteration the City compared fairly well with the whole of the Metropolis, where the drug-adulteration worked out at 9.1 per cent., but it is by no means creditable that the City is not included in the fourteen Metropolitan districts in which no drug-adulteration was discovered.

British Association.

The seventy-sixth meeting of the British Association for the Advancement of Science will be inaugurated at York on Wednesday, August 1, when Professor Ray Lankester, F.R.S., the President, will deliver an address. There will be two evening meetings. At the one to be held on August 3 Dr. Tempest Anderson will deliver a discourse on "Vol-

canoes"; and on August 6 Dr. A. D. Waller, F.R.S., will lecture on "The Electrical Signs of Life, and their Abolition by Chloroform." Professor Wyndham Dunstan, F.R.S., is President of the Chemistry Section, and Professor F. W. Oliver, F.R.S., President of the Botany Section.

John Islip.

Mr. J. H. Williams, pharmaceutical chemist, 35 Commercial Road, Bournemouth, received the following letter the other day, and sent a *pro forma* invoice before venturing to execute the order:

TELEPHONE
520 P.O. EALING

THE AVENUE NURSING HOME
AND
TRAINED NURSES' INSTITUTION.

56, The Avenue,
West Ealing,
Middlesex.

April 23 1906

DOWNSING'S
RADIANT HEAT
BATHS.

Dear Sir,

Please send a small
bottle of your Fine Aromatic Salts
per return.

Do you keep Labalastiers (Lecery)

Eau de Cologne?

Yours truly
J. Islip

Observant chemists will recognise in this letter the return of Mr. Islip to the practices which we have so often exposed. He is an undischarged bankrupt, and has served terms of imprisonment for obtaining goods on credit without disclosing the fact. Our simple advice to chemists who receive such orders as the above is not to execute them until they get the money. The new style of address seems assuring. We have made some inquiries on the spot and have ascertained that the Nursing Home is a genuine concern which was started about three years ago by Miss Watson, who married John Islip a year later. She is matron of the home, and local chemists tell us that she pays for the goods she buys in cash, or otherwise meets bills when they become due. Previous records of John Islip's doings will be found in the *C. & D.*, October 25, 1902, p. 687, and January 7, 1905, p. 2.

Midland Notes.

At the Easter Vestry-meeting two Birmingham pharmacists, Mr. Chase and Mr. Wakefield, have received important appointments at St. George's, Edgbaston.

Birmingham has met with unusual success at the London pharmaceutical examination this month. A pupil of Mr. F. J. Gibson, Wolverhampton, passed at the first trial; also a son of Mr. Alderman Bird, J.P., Coventry.

Mr. Marshall Freeman has addressed a letter to the local Press containing a scheme for moderates in the matter of the Education Bill, around which war is already raging in Birmingham, not a few pharmacists being in the thick of the fray.

The extensive buildings of the Birmingham University at Bournbrook are growing rapidly, and it is hoped that the Conference members will have an opportunity of seeing them and processes going on in the metallurgical and engineering department.

Mr. and Mrs. George Cadbury have built, at a cost of 30,000*l.*, new schools at Bournville to accommodate 540 scholars. They were opened on Monday (April 23). A

unique feature is a costly carillon of twenty-two bells set in a massive square tower. There is also provided an excellent laboratory (physical and chemical).

One day at a local chemist's a request for a small commodity, which it is always expected would be on sale there, brought a polite reply informing the would-be purchaser that they had none in stock. On looking round the customer saw some gramophones, evidently old shopkeepers, which were ticketed at ridiculously low prices "to clear"!

A silent but strong undercurrent of activity is working in Birmingham (1) to combat the illegal trader, (2) to strengthen the union of the craft in view of the B.P.C. gathering, and (3) to increase the membership of the B.P.C. It is stated that one of the most prominent members of the pharmaceutical calling in Birmingham has been induced to take up membership again after many years' quiescence.

A well-attended Council-meeting of the local brotherhood was held on Thursday afternoon, April 19, at the Grand Hotel, Birmingham, Mr. Gerrard in the chair. The agenda was rapidly got through—the arrangements for the winding-up of the session and form of final sessional meeting—and was followed by an augmented meeting of the local Executive of the B.P.C., with Mr. Thomas Barclay in the chair. It was stated that the machinery is working briskly and smoothly, and an enjoyable time socially is promised.

Chemists as Public Men.

Mr. H. D. Badcock, chemist and druggist, has been elected Chairman of the Ottery St. Mary Urban District Council.

At the Easter Vestry meeting of Christ Church, Belper, Mr. W. S. Bowler, chemist and druggist, was nominated vicar's warden, this being the thirty-first year he has held that office.

Mr. George Commins Row, chemist and druggist, has been elected Chairman of Braintree Urban District Council, which gives him a seat on the magisterial bench during his term of office.

Manchester Notes.

A defective hot-water bottle contributed to the death of a child at the Children's Hospital, Pendlebury. There was no rubber washer on the stopper, and some two hours after the child had been put to bed it was discovered that all the water had leaked from the bottle.

Almost every week appeals are being issued on behalf of some Manchester hospital. A local paper, in urging the claims of the Manchester Ear Hospital, had the following: "It seems reasonable to hope that those whose hearing has been restored, as well as their friends, will not remain deaf to the appeal now made."

Experiments in dust-prevention are being made by the Northwich Urban Council with a waste liquor containing calcium chloride from Messrs. Brunner, Mond & Co.'s chemical-works. The liquor is mixed with water and spread by an ordinary watering-cart. The cost is small and the result is said to be satisfactory.

Sheffield Notes.

Mr. W. M. Cooper, Ph.C., of Sheffield, who is at present with Mr. J. A. Mitchell, of St. Mary's Road, Bradford, has been appointed on the dispensing staff of the University College Hospital, London.

The annual report of the city analyst presented to the last meeting of the City Council showed that 730 samples had been received from the inspectors during the year and analysed, including 4 samples of pepper, 4 of ground ginger, 5 of compound liquorice-powder, 28 of camphorated oil, 33 of sweet spirit of nitre, and 105 of spirit. In addition, 11 samples of water for sanitary analysis were received from the medical officer of health, one sample of water for the determination of chlorine, one sample of medicine, and one sample of pills.

The Opium-habit.

One of the speakers at a public meeting held at Ashbourne, Derbyshire, on April 17, at which a resolution was passed condemnatory of the opium traffic from India to China, was Mr. James Osborne, chemist and druggist, who said it was a subject for congratulation that the opium-habit was largely

on the decrease in England. At one time it was very prevalent, notably in the Lincolnshire Fen country, where piles of little packages of the drug were a familiar sight in chemists' shops. As a chemist himself, he had frequently been asked for it by persons who showed little boxes to indicate that they were used to it, but he had always refused to supply it except for medical purposes.

Notifying the Vendors.

The Public Health Committee of St. Pancras reported on Monday having had under consideration the question of a notification being given to traders in cases where it is the intention of the Council to prosecute under the provisions of the Sale of Food and Drugs Acts. They had decided (subject to the usual sanction) that in future when samples were obtained it should be the duty of the Public Health Department to inform the vendors as soon as possible whether it is the intention of the Council to prosecute.

Representations were recently made from representative pharmaceutical quarters to the Health Committee of the Cardiff Corporation on the matter of analysts and their analysis certificates. The matter was dealt with, and the minutes of the Corporation now give the official presentment of the attitude taken by the authorities. Dr. Walford, the medical officer of health, reports that in his opinion it would not be desirable for local authorities to notify in writing to retailers that such samples were free from adulteration. Such a proceeding would probably be regarded by the public as a general guarantee, whereas the certificate of the public analyst relates only to the particular sample submitted to him. At the present time retailers have it in their own power to obtain written evidence of the purity of the articles supplied to them by taking advantage of Section 12 of the Food and Drugs Act, 1875, which enables purchasers of articles of food or drugs to submit them to the public analyst on payment of a fee of 10s. 6d.

Tragic Death of an Isle of Wight Chemist.

We much regret to record the death of Mr. Joseph Edward Richardson, a well-known chemist of High Street, Yarmouth, I.W. The deceased lived alone at his shop, and early on Tuesday morning, when May Edwards, his servant, arrived at 7.30 to commence her usual house duties she discovered that the place was full of smoke. On entering the bedroom she found Mr. Richardson on the bed almost fully dressed with the exception of his coat, hat, and boots. A paraffin-lamp glass was broken, and the bed clothes partly burnt, also the curtain of the bed. She called the assistant, Mr. Newham, and they discovered that Mr. Richardson was dead. An inquest is to be held.

Irish News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Personal.

Mr. R. F. McCartney, pharmaceutical chemist, Coleraine, was last week re-appointed people's churchwarden of St. Patrick's Church, Coleraine.

Bacteriological Laboratory Wanted.

The Ulster branch of the British Medical Association has requested the Corporation of Derry to establish a bacteriological laboratory for the examination of swabs, blood, etc., from persons suspected of suffering from infectious diseases. The idea is to do away with the necessity of sending to Dublin for such examinations. The matter has been referred to the medical officer of health for report.

The Belladonna-liniment Case.

The litigation in the case of Taylor v. Darnell (see C. & D., March 24, p. 457) resulted, at the last Antrim Assizes, in a verdict against the doctor for 65*l.* and costs. The Judge granted a stay of execution. Defendant has intimated that the notice to have the verdict set aside will not be proceeded with. It is estimated that 3,000*l.* has been spent in costs in this case, which has been repeatedly before the Courts.

Alimony Case.

In the Dublin Probate Court on April 24, an application was made in the case of Brittain v. Brittain for an order that the petitioner should pay *pendente lite* a sum as alimony, and that provision might be made for costs already incurred by respondent. After a long hearing as to the means of Mr. Francis Brittain, the Judge awarded alimony at the rate of 15*s.* a week, to run from February 10, arrears to be paid within a fortnight.

Children and Poisons.

A proposal was recently made that notices should be printed for use at Rumford Street Dispensary, one of the most important in Belfast, that poisonous lotions would not in future be given to children under fourteen. The subject came before the Guardians on April 24, when the compounder wrote that there is no regulation under the Pharmacy Act which made such a notice necessary; but the medical officers thought that some such regulation is necessary, having regard to the number of young children who are sent to the dispensaries for poisonous lotions. The Chairman of the Board and other members warmly opposed the proposal, on the ground that it would be a hardship on the poor, and the matter was allowed to drop.

A Curious Qualification.

During the hearing of an action in the King's Bench, Dublin, on April 23, for breach of contract to teach plaintiff the business of a creamery manager, the following dialogue took place:

Patrick Connery (Plaintiff) said he was thirty-five years of age and had no occupation. He had been selling cattle for his brother, and acted as his coachman. He made an effort to become a registered chemist in 1888. He was trained by his brother. He did not think that he had got a false certificate from a registered practitioner. He did not know why the Pharmaceutical Society did not act on the certificate of the doctor. The certificate did not pretend that witness had served his time with the doctor who gave it.

What did it certify?—It certified that I bought some drugs from him. (Laughter.)

In reply to further questions, witness said he did not think that the certificate that he required was one that he had served his time in a chemist's shop. He had told the doctor what he wanted the certificate for.

And you went to a doctor with whom you had not served your time and who knew nothing about you?—There was no necessity to serve my time. The certificate I got from him was that I bought some poisons from him at various times.

And that is the qualification which you sent in for a registered chemist?—Yes.

Cross-examined: He dropped the idea of being a chemist, and took to creamery to earn a living. That was his first attempt to get registered as a chemist.

Scotch News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Personal.

Mr. W. Park, Broughty Ferry, and Mr. J. Hutton, Brechin, were other two Forfarshire men present at the Conference in Edinburgh on April 12.

The Kinninmont Prize.

Intending competitors are reminded that April 30 is the last day on which names can be entered for the above, and should be sent to the Secretary, Mr. William L. Currie, 223 Byres Road, Dowanhill, Glasgow.

Chemical Absorption.

The United Alkali Co., Ltd., have completed negotiations for the purchase of Messrs. Henderson & Co.'s works at Irvine. The latter at one time had a great reputation for the production of heavy chemicals.

Edinburgh Chemists' Golf Club.

The Spring Holiday Competition of this club was held over Hedderwick Hill course on Monday, April 23. The "Gibson Handicap Medal" along with captain's and club prizes were played for. There was a good turnout, and the prize-winners were: Gibson Medal and captain's prize, H. B. Care, 98—27=71; second prize, J. G. Robb, 100—27=73; third prize (tie), Geo. Baxter, 100—24=76; James Stott (scratch)=76.

French News.

(From our Paris Correspondent.)

FIRE AT A CHEMICAL-WORKS.—A serious fire occurred on Sunday morning, April 22, at the Tancrède Chemical-works, at Aubervilliers, near Paris. The fire-brigades from four different localities were requisitioned, and, owing to a strong wind that was blowing, they had much difficulty in preventing the fire spreading. As it was, considerable damage was done.

IMPRUDENCE OF A DENTIST.—A Paris dentist has been sentenced to a fine of 5,000f. (200*l.*) and one month's imprisonment on the charge of "wounding by imprudence." He had to extract thirteen teeth for a lady client, and used ethyl chloride as an anæsthetic—the result being that the patient's glottis was affected by it, and thus allowed the root of a tooth to fall into the lungs. This brought on an attack of pneumonia, from which the patient only recovered after expectorating the root in a fit of coughing.

GALLO-ROMAN PHARMACY AT LYONS.—In an interesting little pamphlet a Professor of the Mixed Faculty of Medicine and Pharmacy points out that temples to Mercury abounded in this part of Gaul, and traces the arms of the Lyons College of Medicine—a cock and a serpent—to the altars of this god. Lyons already traded with the Levant when the Romans arrived, and Eastern drugs were thus early introduced into the centre of France. Abascantus, who corresponded with Galen, appears to have been an apothecary (doctor mixing his own medicines). Copper salts, myrrh, guaiacum, gum, poppies, etc., were known, and pots for balms and perfumes have been found in the Roman baths at Champvert. Septimus Saponarius (whose monument has been discovered) was one of these perfumers—the *Saponarii*—who made a dye which gave the fashionable golden tint to black hair. This old form of hydrogen peroxide was very popular, we are assured, among the Gallic "*jeunesse dorée*."

LANGLADE OF LYONS.—A Lyons daily ("*La Dépêche*") is publishing some interesting notes on "The Commune at Lyons in 1870-1," by M. Louis Andrieux. One of the first acts of this body, which was formed immediately the Republic was proclaimed, on September 4, 1870, was to form a Comité de Salut Public on the most approved revolutionary principles. One of the members of this committee is thus described by M. Andrieux: "Langlade, pharmacist, sold the products and propagated the ideas of François-Vincent Raspail, who had just been elected deputy for the Rhône department. When the people sang the '*Marseillaise*,' Langlade would at the end of each verse, add in a nasal voice a supplementary chorus in honour of his hero, which reveals the enthusiasm and the hates of the Lyonnese mob, as follows:

"Avant que Raspail
Monté au corbillard
On verra sur la paille
Pourrir les cafards.

(Free translation.)

"Before the great Raspail
His quietus has got,
Upon the prison straw
His crafty foes shall rot."

PROVINCIAL PHARMACY.—A recent visit to St.-Etienne gave me the impression that as a town it seems to combine the sooty hue of London with the straight rectangular street-arrangement dear to New Yorkers. Pharmaceutically I was agreeably disappointed. In a city of the working classes I expected to find something very special and "cutting"; but, so far as my observation went, it is very much the same as elsewhere. Down the main street—they call different parts of it rue Gambetta, rue de la Préfecture, etc., but it is the long straight narrow High Street of the city—the pharmacies keep that strictly professional aspect which thinks it heresy to display anything more commercial than a carboy or a glass jar of quinine to the eyes of the profane passer-by. The celebrated Grande Pharmacie de France is close to the Place de la République (the "Bank" or Trafalgar Square of St.-Etienne), and, except for a couple of dozen bottles of patents in one window, is as modest and uncharacteristic as its neighbours. Close by here are a

couple of perfumery bazaars—the "Central Perfumery" and the "Palace of Perfumes." At the latter I noticed a few English hair-specialities—Mrs. S. A. Allen's, the Melrose, Harris's Sublimeor—and one or two German articles in the same line, but the perfumery was all French—Piver's, Guerlain's, and so on. In fact, the only original feature about the town is the drug-shop signs. These are very quaint. Up the rue Gambetta is the "White Bear"—a statue over the door represents the monarch of the ice-fields pounding drugs in a golden mortar. Two other drug-shops had very fine carved gilt signs representing uncanny beasties which rather puzzled me at first, but turned out to be the "Centaur" and the "Capricorn." These classical and mythological specimens of natural history contrasted with the sweet simplicity of the "Bidon" (oilcan) hung out as a sign down the rue de la Préfecture. The Place du Peuple is the sign of St.-Etienne. At noon it presents a sight which I can only compare to the New Cut on Saturday night—one dense mass of working-class buyers. I expected to see four or five cutting pharmacies there, but only noticed one *officine*—the Pharmacie Bect—and the quaint old building called the "Droguerie de la Tour," which looks like a castle barbican and is a peaceful shop for chemicals. The only place where I saw price-lists in the window was the Pharmacie de la Croix Rouge, a corner shop, with monster red Geneva crosses on its windows.

TRAGIC DEATH OF PROFESSOR CURIE.

LATE on Thursday afternoon, April 19, an impression of a most painful character was created in Paris by the announcement that a fatal accident had occurred to Professor Pierre Curie, the eminent scientist, whose name has become so famous in connection with the discovery of radium. By a cruel fatality he slipped and fell on the wet asphalt while crossing the rue Dauphine, colliding with a pair of horses drawing a heavy dray. One of the hind wheels of the vehicle passed over his head, the brains being crushed out. The spot where the accident occurred is at the corner of the Quai Conti, opposite the Pont Neuf. This was at half-past two o'clock, and death was instantaneous. In this terrible manner passed away with tragic suddenness the co-discoverer of radium, which has created a revolution in chemistry and physics. By his death France loses in the flower of his age one of her most illustrious *savants*, the value of whose scientific work stands out with remarkable distinctness.

The body was carried to a pharmacy on the Quai Conti, but the proprietor declined to receive it, on the pretext that the shop was too small. He suggested it being put in the passage of the house, but this was not done, and, by an irony of fate, for half an hour the mortal remains of the great scientist lay on the muddy pavement. Finally a stretcher was brought, and the body was conveyed to the nearest police station. Then only was the identity established by means of documents found in the pockets of the clothes.

Professor Curie (whose portrait we give) was forty-seven, and leaves a widow, Mme. Curie, to whom the discovery of radium is directly due, and whose name is closely identified with that of her late husband in the chemical side of his scientific work. They had two girls, the elder of whom is eight years old. M. Curie, sen., a retired doctor, who is over eighty years of age, resided with his son, and he was the first member of the family to learn the terrible news. Mme. Curie heard it later, on returning home at half-past six, and her grief was awful. Telegrams, letters, and messages of condolence have poured in on the sorely stricken little family, M. Fallières, the President of the French Republic, being prompt to show his sympathy.

The deceased scientist sought no worldly honours during his lifetime, and his express desire was that none should be shown at his funeral. The obsequies took place on Saturday



afternoon, April 21, at half-past three o'clock, in the strictest privacy. No invitations were sent out, and only a few personal friends and the pupils of the distinguished scientist were present. Among them were several professors of the Sorbonne and the College of France, also M. Appell, *doyen* of the Paris Faculty of Sciences, and MM. Cheneveau and Debiere, Professor Curie's preparators. M. Briand, Minister of Public Instruction, was also present. The coffin was placed in the dining-room, covered with a simple black cloth, without flowers or any decoration. Near the coffin sat Mme. Curie, whose despair seemed tragic, and none dared approach her. Soon the funeral *cortège* set out for Sceaux, near Paris, where the interment took place in the family grave. At the last moment Pierre Curie's pupils placed a wreath of flowers on the coffin.

Pierre Curie was born on May 15, 1859, in Paris, where he was educated, following the courses at the Sorbonne. He studied chemistry and physics with his brother, and was already a notable figure in scientific circles before he came prominently to public notice in 1898, when the discovery of radium was announced by him. The work in this connection had been carried on jointly with his wife, *née* Marie Skłodowska, the daughter of a professor of physics at Warsaw. She had come to Paris for the purpose of study, and they met in the laboratories of the old Sorbonne. Their first studies on radioactive bodies date from 1896, and followed the discovery of the properties of uranium by Becquerel in 1896. The idea occurred to Professor and Mme. Curie that certain of the uranium minerals, such as pitchblende, might possess radioactivity in a greater degree than metallic uranium, and this proved to be the case. In 1903 Professor Curie described the properties of the new substance at the Royal Institution, London. Among his other notable work may be mentioned his researches with his brother, J. Curie, professor of mineralogy at the University of Montpellier, on Piezo-electricity—a property, discovered by them, of certain crystals, such as quartz, giving off electricity when compressed in a certain way. In many other directions he did excellent work in physics. He was appointed professor of physics at the City of Paris School of Chemistry and Physics in 1895. Five years later he was given charge of the lectures on physics at the Sorbonne. In 1903 the Royal Society of London awarded Mme. Curie and himself the Davy Medal, and the Nobel Prize for Physics was presented to them in the same year, jointly with Professor Becquerel. In 1904 a special credit was voted by the French Parliament to found a professorship for M. Curie at the Paris Faculty of Sciences, and finally on July 3, 1905, the Academy of Sciences elected him, practically unanimously, a member of that body for the section of physics.

A man of science in the very essence of the word, M. Curie despised publicity and worldly honours. Holding that science is its own reward, he declined the decoration of the Legion of Honour, a distinction usually much sought after by Frenchmen. It is officially announced that the Minister of Public Instruction will ask the French Parliament to vote an annuity to Mme. Curie.

The Paris Academy of Sciences closed its usual weekly meeting on Monday last in sign of mourning after hearing a valedictory address of regret by M. Henri Poincaré, who traced the scientific career of M. Curie. There was a large attendance. The speaker referred to the accident that had proved fatal to one of the most illustrious, the most esteemed, and one of the youngest of their number, who was one of those of whom Frenchmen, jealous of the glory of their country, might have legitimately hoped great things for a long time to come. An astounding discovery made him suddenly famous, and many persons ask themselves, said M. Poincaré, if radium is not a source of perpetual motion or the first example of that transmutation of the elements dreamed of by the alchemists.

A consolation, if such can be found, in the premature and sad death of Pierre Curie, is the fact that there is every hope that Mme. Curie will continue, with renewed ardour, those researches in which she was jointly engaged at the time of her husband's death. Mme. Curie is herself a competent physicist and has been her husband's faithful assistant worker, nor will she be likely to depart from the spirit of disinterestedness which has hitherto been so admirable in both of them.

British African News.

(From our own Correspondents.)

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

South African Pharmaceutical Association.
Pharmaceutical Society of Cape Colony.
Natal Pharmaceutical Society.
Transvaal Pharmaceutical Society.
Rhodesia Pharmaceutical Society.
Northern District Chemists' Association.
Pharmaceutical Society of Orange River Colony.

British East Africa.

MR. CHASE, of the Chamberlain Medicine Co., is visiting East Africa on business bent.

DURING January 1906 the imports of drugs, medicines, and chemicals into Mombasa amounted to Rs. 12,358, of which Rs. 481 were re-exported to German East Africa. Surgical instruments were also imported to the value of Rs. 441.

VANILLA.—Seven hundred and thirty-one pounds of vanilla from the Dunga (Zanzibar) plantations was shipped to London by the *Putala* in March. This is the second consignment that has been sent to England this season from Dunga, the total output of vanilla from those plantations this season being approximately half a ton.

UGANDA DEVELOPMENTS.—There has been considerable excitement in Entebbe over a new land company, a director of which is Mr. A. E. Bertie-Smith, who is also the vendor. The company is the first registered in the Uganda Protectorate and is promoted for the purpose of building, erecting, and selling houses, shops, etc., which are badly wanted in Entebbe and elsewhere in the Protectorate.

Cape Colony.

MANGANESE ORE.—As already noted in the *C. & D.*, March 3 (p. 355), considerable attention of late has been paid to the development of manganese properties in South Africa. Although it is many years since manganese ore was first found in the Hout Bay and Constantia district, it is only within recent months that anything like sound prospecting has been undertaken. A company has been formed to work the properties in those districts.

Natal.

MR. R. F. DORE has been admitted to practise as a chemist and druggist in the Colony.

BUSINESS IN DURBAN is again quiet, as the malaria epidemic is practically over. Owing to the energetic measures taken by the Borough Medical Officer of Health (Dr. Muri-son) and his staff, it is anticipated that there will be a big decrease in the number of malaria cases next summer.

Transvaal.

BUSINESS CHANGE.—Mr. Stanley Banks opened a new pharmacy at the corner of Victoria Street and Willow Road, George Town, Germiston, on April 2. The premises were originally in the occupation of the late Mr. B. Litovitch, who had conducted a chemist's business there for some years. Mr. Banks is well known in Pretoria and Johannesburg, having been in the service of Mr. A. C. Evans, Church Street, and of Mr. J. H. Dinwoodie (President of the Transvaal Pharmacy Board) for a considerable time.

CAPE PHARMACY BOARD.

A MEETING of the Pharmacy Board of Cape Colony was held at Cape Town on February 28, when the principal business was the consideration of the proposed alterations and additions to the Poison Schedule. A deputation from the Colonial Medical Council visited the Board in connection with the matter, and as soon as the deliberations have been completed a report of the proceedings will be issued.

The Board considered a communication from the Mowbray Municipality complaining of the difficulty of obtaining medicines in Mowbray after certain hours, and giving an instance where death was probably accelerated thereby. Inquiry was also made as to whether a Bill could not be

introduced compelling chemists to be in attendance at all hours. It was decided to reply to the effect that in the opinion of the Board it would not be possible to legislate in this direction without interfering with the liberty of the subject, and to suggest that the Mayor should confer with the chemists practising in the Municipality with a view to arriving at some arrangement whereby a person would be in charge of at least one of the shops to meet the public at all hours.

Notice of the following motion was given :

That some alteration be made in Rule 16 in order that the registration-fee may be included in the examination-fee.

The Board has approved of the following applications for registration : Alexander Laird Blair, Leonard Claude Allen Eastmead, John Howell Carter, John Percy Green, John Murdoch, Arthur Herbert Nowell, Arthur Barclay Bull (all registered in Great Britain), and John Sinclair Corner Harous (registered by the Colonial Pharmacy Board).

Demerara Doings.

(From our Correspondent.)

ALTHOUGH all accounts in British Guiana are kept in dollars and cents, the actual currency is English money, with the exception of notes of \$5 and upwards. The most common coin is the old-fashioned fourpenny-bit, which is always spoken of as a "bit." A threepenny-bit is referred to as a six-cent piece.

ATTENTION has been called to the fact that vultures—always so much in evidence in the tropics—frequently carry carrion to the roofs of dwelling-houses to devour it, with the result that portions of it are often left behind there. As the whole of the drinking-water of Georgetown is rainwater collected on the roofs, it is only natural to infer that it is often fouled by the remains of the birds' feasts. The result is that the local authorities have authorised the destruction by the police of a certain number of vultures which had hitherto enjoyed protection. The birds are as tame as ordinary domestic poultry.

THE ORDINANCE relating to the registration of chemists and druggists in this Colony enacts that the name of the registered person shall be exhibited over the door of the pharmacy. Registration is granted upon passing an examination, but the certificate of a home qualification is accepted in lieu of this. Most of the druggists now in business in Demerara were exempted from examination when the Ordinance became law a few years ago, owing to the fact that they had already been some years in the trade. This accounts for the fact that several men are now keeping open shop for the selling of poisons and dispensing of medicines who have had practically no real training in pharmacy. At the last examination four candidates presented themselves, but all were unsuccessful. The Board of Examiners consists of the Surgeon-General, the Government Analyst, and Messrs. Gaskin and Fonseca. Not one of these four gentlemen possesses a home qualification in pharmacy.

PRECAUTIONS for the prevention of malaria are very properly being taken; the most important being those for the destruction of mosquitoes. The fact that the city of Georgetown is $4\frac{1}{2}$ feet below high-water mark renders intertidal sluice-drainage a necessity. Many of the streets have a canal running down the middle, which is a notorious breeding-place for mosquitoes. One proposal is to fill up these canals or trenches, but this is considered impracticable. Another proposal is to spray the surface of the water once a fortnight with kerosene oil. Taking 1 oz. of oil to cover 15 square ft., this would amount to over 3,000 gals. annually. Apart from the expense, objections have been raised against the destruction of the beautiful *Victoria Regia* water-lily and other ornamental vegetation which would follow the use of the oil; it has also been pointed out that the water would be rendered unfit for washing and other domestic purposes. Yet another method has been brought forward—namely, the stocking of the canals with gold-fish to devour the mosquito larvae; but as the water already contains small fish which perform this duty, the proposition has met with little support.

Colonial and Foreign News.

IN 1904-5, 616 candidates qualified as pharmacists in the German Empire, as against 577 in the preceding year.

"CAPSULOIDS" AND "TABLONES" have by the authority of the Medical Council of Russia been placed upon the list of medicines which may be imported into the Czar's dominions.

JAPAN'S NEW CUSTOMS TARIFF.—The new Customs Tariff Bill passed the Diet on March 27 in a slightly amended form. The average rate of duty provided for by the Bill is 13 per cent. The measure is decidedly protective and retaliatory in character, and the Government expect that its operation will increase the revenue by 2,500,000 yen (250,000*l.*).

ROUMANIAN PATENT LAW.—Messrs. W. P. Thompson & Co. inform us that under the new law patents are granted without examination, and without any guarantee of novelty, utility, or legality. All inventions patentable in this country can be protected in Roumania, except foods for men or cattle, medicines, and healing or disinfecting devices. Patents last for fifteen years except when imported from abroad. Up to July 13 patents can be granted for inventions already patented abroad, to expire with their home patent.

"ANTICELTA" AND "COZA."—The head of the Berlin police has published notices in regard to the "Wonderful Coza Powder" (*Wunderbaren Cozopulver*), a remedy for drunkenness made by the Coza Institute, 62 Chancery Lane, London, W.C., and "Anticelta Tablets" for obesity advertised by the Anticelta Association, at the same address. The notices state that the powders consist of impure sodium bicarbonate, and the tablets consist chiefly of sodium bicarbonate. [The institute and association referred to do not occur in the London Directory, but at 61 and 62 Chancery Lane is Mr. Ove Nielsen, importer of chemists' sundries, in whose name "Coza" has been registered as a trade-mark, and "Anticelta" has been applied for. We may observe that German official analyses sometimes treat as "impurity" vegetable constituents of mixed medicines.—EDITOR.]

BARIIUM NITRATE FOR CARLSBAD SALT.—There is considerable alarm in Germany at present regarding the deaths of three individuals in Corbetta and Weissenfels, Halle, after taking artificial Carlsbad salts. The first case was that of a basket-manufacturer (32) in Corbetta, who died on March 25, a day after taking Carlsbad salt prescribed for him, and dispensed at the Hirsch-Apoteke, in Weissenfels. Investigation proved that death was due to poisoning with barium nitrate, and the authorities intervened before the funeral took place. In Weissenfels Drs. Born and Esslinger, both young men of thirty-six and thirty-eight years, and others also died, and it is supposed that they are the victims of the same error. It is certain that Dr. Esslinger had used the "Carlsbad salt." Analysis of the salt by Mr. G. Marpmann showed it to be barium nitrate, with some sodium chloride as an impurity. The Carlsbad Town Council has issued a notice, in the course of which it is stated that the proprietor of the Hirsch Apoteke bought the salt from a Leipzig wholesale drug-house, and it is further notified that the genuine Carlsbad salt is not sold in bulk.

CANADIAN NOTES.—The Copeland-Chatterson Co., Ltd., is taking action against Messrs. Lyman Bros. & Co., wholesale druggists, for alleged infringement of sheets for use in loose leaf ledger binders.—The House of Commons, Ottawa, on April 10, resolved, on the motion of Mr. Boyer

That in the opinion of this House it is expedient to take, without delay, energetic measures to prevent the adulteration of maple syrup, now being done on a large scale and to the detriment of the farmers who produce the natural syrup. It is stated that the syrup industry represents \$1,750,000 a year, and that it might easily be quadrupled if the spurious stuff were stamped out. The artificial syrup is made in various ways, as by melting maple sugar and adding glucose and flavouring-extracts, and by boiling hickory wood and bark and mixing the concoction with the ordinary syrup. These do not have the real flavour of maple syrup, which is the result of the combination of different substances in the sap, but is chiefly due to an ether or aldehyde with high boiling-point.—The "Toronto Star" has started a campaign against the Bill referred to in the *C. & D.*, April 21,

which would require the directors of chemist-companies to be chemists. The "Star" has got hold of all the arguments used by English companies, including Sir Michael Hicks-Beach's engine-driver one. The "Star's" attack is in substance a defence of department stores.

OLIVE OIL FOR GERMANY.—Under the new German tariff olive oil can be imported in casks free of duty provided it is pure, a fact to be duly certified. Oil from Italy under this condition will have to be accompanied by an analyst's certificate of purity, endorsed by a German Consul, or similarly proved at the port of entry. The new season's oil is now being handled, but there are not adequate analytical provisions in the Italian olive-districts, so the imports fall to be analysed. A further difficulty has arisen in connection with the test for admixture with sesame oil (reddening of hydrochloric acid shaken with it). The regulations say that if the oil does not show a red colour which disappears directly, freedom from sesame oil may be assumed, but it is stated that absolutely pure oil gives the reaction. A Dresden Association has accordingly asked the German Government to simplify the regulations by accepting as sufficient proof of purity an attestation of origin and purity issued by the responsible Italian Mayor's office or the Italian Chamber of Commerce. As to the hydrochloric-acid test, the Association submits that full confirmation of impurity as determined by other tests should be provided for.

American Notes.

THE N.A.R.D. is facing a big cut-rate war in Boston. Four or five of the larger retail dealers, including Jaynes & Co., owners of five stores, disagree with the local Association, and have been black-listed. The fight threatens to be hard.

THE FLORIDA COLLEGE OF PHARMACY is a new institution which has just been organised in Jacksonville, Florida. This makes about eighty-two pharmaceutical schools and colleges in the United States, not to mention two or three over the border in Canada.

MR. ALBERT E. EBERT, a prominent Chicago pharmacist, and doubtless more or less well known to British chemists from his presence at one or two meetings in the past of the British Pharmaceutical Conference, has found it necessary to abandon the store in which his pharmacy is located. A large and aggressive concern has rented the building "over his head" at a larger price. Mr. Ebert is about sixty-seven years old, and may possibly retire from business.

PERUNA.—It has been several times stated in this column how eleven patent medicines have been declared by the national authorities at Washington to be liquors within the meaning of the law. It is now to be noted that "Peruna," the best-known member of the group, and also the best selling patent medicine in the United States, has been so changed in composition as to evade the ruling of the revenue authorities.

TWO GRADUATION PRE-REQUISITE BILLS have made their appearance during the present legislative season—one in the National Congress at Washington, and the other in the Ohio State Legislature. The former is likely to pass, but will affect Washington City only. With respect to the latter, it is yet too early to make any prediction. If both measures succeed, six American districts will have adopted the graduation requirement. The four which have already done so are New York, Pennsylvania, Wisconsin, and Hawaii.

THE ACTION FOR DAMAGES which the World's Medical Dispensary Association, manufacturers of Dr. Pierce's remedies, brought against the "Ladies' Home Journal" two years ago, has now reached its conclusion. The jury awarded a \$16,000 verdict to Dr. Pierce, but both complainants and defendants are dissatisfied with the result, and both have asked for a retrial. It will be recalled that the suit was brought because of alleged inaccurate and libellous statements made in the journal concerning "Pierce's Favorite Prescription."

RECIPROCITY.—Several movements are on foot to bring about a greater degree of reciprocity between the different State boards of pharmacy in the exchange of registration-

certificates. The newly organised "National Association of Boards of Pharmacy" has now got to the point where twelve examining boards are reciprocating certificates under certain restrictions. In addition to this, a meeting was recently held in Minneapolis, Minnesota, of representatives of the boards of pharmacy of the north-western group of States, the same object being in view.

THE MANN BILL.—One of the interesting rumours in the American drug-trade during recent weeks is the assertion that the N.A.R.D. has dropped the Mann Bill. It will be recalled that this congressional measure was framed so to amend the American patent laws as to render it impossible for German producers to get that measure of protection in this country which would enable them to exploit the public as thoroughly as they have been doing for a generation. Unfortunately, however, the Mann Bill was so drawn that it would incidentally have shackled American producers in an exceedingly regrettable manner.

THE PATENT-MEDICINE PROPRIETORS seem to be meeting with considerable success in killing the innumerable Bills before the different State Legislatures intended to regulate their products and in many instances to drive them out of the market. Samuel Hopkins Adams, the author of the series of articles attacking patent medicines in "Collier's Weekly," together with other reformers, has striven to secure the passage of some of the Bills, and may yet possibly succeed, although his chances are diminishing day by day. In many States the druggists consider the Bills inimical to their interests, and are helping the proprietors in attacking them. So far not one of them has passed.

COMPANY PHARMACIES.—America has never developed great company pharmacies like those of England, but there are a number of chains of drug-stores throughout the country which seem to be gradually increasing their operations. The Owl Drug Co., of California, owning five stores in San Francisco, two in Los Angeles, and one in Oakland, has just purchased two additional stores in San Francisco at a cost of \$100,000. It is said that before these recent acquisitions the company did an annual business of \$2,000,000. [This was written before the earthquake.—EDITOR.] The United Chemists Co., which was reported two or three months ago to intend the formation of a chain of drug-stores in all of the leading cities of the country, has apparently been abandoned as a lost cause.

FREE ALCOHOL.—The Committee on Ways and Means which sat at Washington on March 30 authorised a favourable report on the Free Alcohol Bill, which removes the internal revenue duty from denaturalised alcohol for use in the arts and sciences. The Bill has the approval of Commissioner Yerkes, and it is estimated that the annual loss in revenue will not exceed \$500,000, and may not be more than \$300,000. The friends of the Bill declare that it will be of incalculable benefit to manufacturers, and will afford an enlarged market for farm-products from which alcohol is made. The sale of denaturalised alcohol as a beverage or for liquid medicinal purposes is forbidden by the measure, under penalty of a fine not to exceed \$5,000, or five years' imprisonment, or both, in the discretion of the Court.

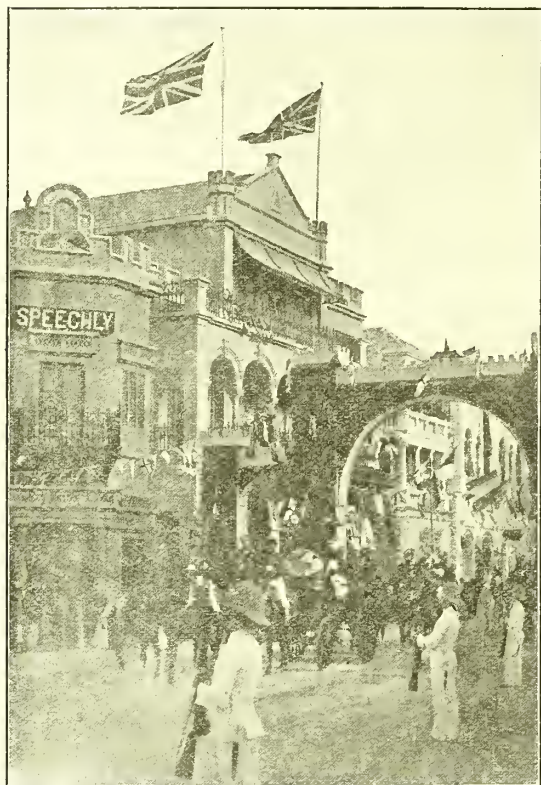
ANTI-PROPRIETARY LEGISLATION.—A law was enacted in North Dakota last year providing that patent medicines which contain certain ingredients must state the fact upon the label. As a sequel to this legislation the Food Commissioner of the State has placed a considerable number of products upon the tabooed list, where they will remain until their labels are made to conform with the new requirements. Hall's catarrh-cure is proscribed because it contains cocaine; Mrs. Winslow's soothing-syrup and Red Cross pile-cure because they contain opium; Coke's dandruff-cure and Newbro's "Herpicide" because they contain methyl alcohol. A number of alcoholic products are declared illegal unless the content of alcohol is stated on the label. Among these are Hostetter's stomach-bitters, Dandelion bitters, Appentine bitters, Electric bitters, Walker's tonic, and Columbian stomach-bitters.

"TEETH EXTRACTED WITH GREAT PAINS" is the refreshing announcement at a Clerkenwell dentist's.

SIMARUBA-BARK in the value of 349%, or 16,266 kilos, was exported from Ciudad Bolivar during 1905; and of cinchona-bark 10,628 kilos, valued at 268%, was exported.

India and the East.

(From "C. & D." Correspondents.)



THE PRINCE AND PRINCESS OF WALES IN KARACHI.
The procession passing the premises of Mr. E. Speechly,
Pharmaceutical Chemist. (Photo. by Mr. A. Sykes.)

MR. JOSEPH S. BADDOUR has purchased the Farmacia L. Chiara, at 3 Boulevard di Ramleh, Alexandria, Egypt.

JAPANESE CAMPHOR was at famine prices in the Bombay market when the mail left, dealers obtaining Rs. 3 (4s.) per lb.

MR. ALFRED PELL, F.C.S., of Messrs. Kemp & Co., Ltd., wholesale chemists and druggists, Bombay, is this year's President of the Bombay Trades Association.

X-RAYS AT DEHRA DUN.—The scheme for the establishment of an x-ray institute at Dehra Dun, particulars of which we gave some months ago, has now taken definite shape.

A VOLUNTEER ENTHUSIAST.—Troop Sergeant-Major W. Wilson (chemist and druggist, Rawal Pindi and Murree), Punjab Light Horse, is this year best man-at-arms in the corps, with a record score of 334 out of a possible 370.

INDIAN ALCOHOL.—Dr. P. C. Ray read an interesting paper at the April meeting of the Asiatic Society of Bengal on the Hindu method of manufacturing spirit from rice, and its scientific explanation, showing that the average yield of spirit in a good distillery is 4 gals. proof from 82 lb. of rice.

THE GOVERNMENT OF INDIA have ruled that a royalty of 2½ per cent., calculated on the sale-value at the pit's mouth, should be levied in respect of arsenic, fluorspar, barytes, graphite, manganese, banxite, felspar, and corundum (if the value does not exceed Rs. 750 a ton).

TO VOLUNTEERS.—Captain W. Donald Smith, of the Madras Volunteer Guards, has addressed a letter to the "Times of India," asking if any efficient Volunteer who is a recognised good shot, and who is going home this year, will join in an Indian team to compete at Bisley. At present he has six names registered.

CHROMITE.—A remarkable advance is noted in the exploitations of the chromite deposits in Baluchistan, which were discovered in 1901. At present the ore is being raised entirely for export to Europe.

AN UNUSUAL APPLICATION has found its way to the records of the Indian Patents Department in the desire of a native medical practitioner at Rawal Pindi to register a preparation he calls "Muschicide," or signal rat-exterminator.

MR. FRANK ROSS, for the past five and a half years senior assistant with Messrs. Thomson & Taylor, Bombay, joins Messrs. W. E. Smith & Co., Ltd., Madras, as manager on May 1. During Mr. Ross's association with Messrs. Thomson & Taylor three European assistants have been added to the establishment, and two branch businesses have been opened.

DR. C. FERNANDEZ, M.D., J.P., of Beynon & Co., chemists, druggists, manufacturers, and general merchants, Bombay, is at present in London, and letters may be sent to him c/o the agents of the firm (Messrs. J. T. Craig & Co., 17 Coleman Street, London, E.C.), or c/o Messrs. Thomas Cook & Sons, of Ludgate Hill, E.C. Dr. Fernandez is a J.P. and honorary magistrate of Bombay and lecturer on dermatology in the Grant Medical College.

FOREST-PRODUCE.—The Indian Government Forest Administration Report for 1904-5 contains some interesting information regarding minor forest-produce, such as galls, gums, honey, and beeswax, which are for the most part collected departmentally, and the sales of which form a very important item of revenue (nearly five lakhs). Among these special articles of produce we note that in South Canara 16 tons of catechu was manufactured at a cost of Rs. 160 per ton, and sold at Rs. 700 per ton.



THE PRINCE AND PRINCESS OF WALES IN KARACHI.
The procession viewed from Mr. Speechly's premises.

PATENT MEDICINES IN JAPAN.—Considerable quantities of Japanese medicines are exported to China and Korea yearly; Among them the best known are "Hotan," "Seikisni," and "Senkintan."—A number of discharged soldiers of the 9th Division of Kanasawa have agreed to establish a corporation having for its object the supply of patent medicines to Manchuria and Korea. The name of the company will be the Far East Trading Corporation.—American patent medicines, especially "Actina" and "Peruna," are imported into Japan in increasing quantities.



PREMISES OF MESSRS. E. BROOKS & CO., KARACHI,
Decorated for the Prince and Princess of Wales's Visit.

BANGALORE VACCINE.—The total quantity of vaccine manufactured at Bangalore during the year compares very unfavourably with that prepared in the preceding year, being sufficient only for 216,141 cases, as against 513,255. The cost of manufacture of the quantity sufficient for each case was 3.4 pies, as against 4.1 pies in the previous year, due to the expenditure remaining almost the same as in the year previous, while the quantity manufactured fell short by the quantity sufficient for 297,114 cases. The failure to earn a profit was the result of the loss of the demand for lymph from Madras.



THE NATIVE METHOD OF CUPPING IN INDIA.
(From a postcard sent by Mr. C. W. White.)

PETROLEUM IN INDIA.—The production of petroleum in India during 1904 was 118,491,382 gals. (of which the production in Burma represents 115,903,804 gals.), compared with 87,859,096 gals. in the previous year. The rapid increase in production has naturally displaced some of the imported foreign oil, of which only 70,590,858 gals. was introduced, against 76,361,579 gals. in 1903. The reduction

has been entirely on Russian oil, which fell from 65,434,324 gals. to 42,256,738 gals. At the same time there has been a remarkable increase in the exports of petroleum—from 747,834 gals. in 1903 to 3,787,677 gals. in 1904.

MALAYAN MEDICINE.—In a recent number of the "Journal" of the Malayan Branch of the British Medical Association Dr. Daniels urges a study of native drugs. The flora and fauna of Malaya present so many peculiarities, he says, that they deserve the most careful scientific investigation. One of the best-known of the native poisons is "Tuba-root" (*Derris elliptica*). The crushed root, either alone or used (native fashion) mixed with lime, stupefies or even kills large fish. The Chinese cultivate the plant, and it is a common article of sale in the markets of the towns. The chemical constituents of the root have not been investigated, and Dr. Daniels suggests that in addition to the uses for which it has been employed, and for the destruction of mosquito larvæ, an emulsion of the root might be used as a wash for stables and cattle-sheds to counteract the verminous diseases of cattle and horses that are prevalent. There are several drugs in use among the natives as remedies for dysentery and other intestinal diseases. Some of these are of little more value than those already found in the British Pharmacopœia, but the shell of the mangosteen and some others are useful on account of the amount of tannic acid they contain. The definite poisons, such as "Ipoh" and "Rugis" may contain sufficiently controllable ingredients to be of distinct medicinal value.—Dr. Gimlette has collected a large series of indigenous plants used by the natives for the treatment of local and general diseases. Those having the best opportunity for studying the use of native medicines by natives are the medical men who work in the greater part of Pahang. Such workers, however, have no access to laboratories for the purpose of analysis.

At the Counter.



A GOOD SIDE-LINE.

Chemist: "Good morning! Major."

Major: "Good morning! I have—aw—been advised to come—aw—to you as an expert."

Chemist (*much flattered*): "Quite so! Quite so!"

Major: "Well, I wanted you—aw—to be kind enough to—aw—bite two inches off my puppy's tail!"

PHONETIC.—Mr. W. Moffatt, of Low Fell, sends us an original order which reads as follows:

2 drom linshe robenbob
2 drons sprites come
2 drom spirts hope hon
2 drons red laverer

Pharmacy in Japan.

ENGLISH chemists who are sojourners in Japan find it extremely difficult to comprehend how Japanese pharmacy is conducted. The Japanese are exceptionally suspicious by nature, or, as they themselves would say, "reserved," and resent the prying eyes of the foreigner. From time to time we have been able to publish particulars about modern Japanese pharmacy, including a set of fine photographs of the pharmaceutical department of the Imperial University, Tokyo, where American and European methods are adopted so far as they are compatible with the needs of the people. To these we now add observations by a Japanese pharmacist which we cull from a letter recently received.

The development and progress of Japan have, he says, been wonderful since the days when Commodore Perry visited the country with his Koro-Fune or "black vessels." Then she awoke from her long sleep, adopted the customs of Western civilisation, and has taken rank as one of the first-class Powers of the world. Yet, strange to say, one finds in Japan the methods of modern civilisation side by side with ancient habits, and this is as true of pharmacy as of any other department in everyday life.

Japanese medical men dispense their own prescriptions, having their own dispensaries for the purpose, which are

MINERAL WATER.

PRODUCED AT NUNOBIKI, KOBE, JAPAN.

Analytic report of the Imperial Japanese Government Hygienic Laboratory, Osaka.

THIS water is faintly coloured, free from smell, slightly sweet, salt and irritatory in the taste. It represents a faint acid reaction but when boiled highly bubbles, become strongly alkaline and separating a white deposit.

Its specific gravity is 1.00442 at 16°.

The quantities of constituents found in one thousand parts of the water are as follows:—

Chloride of Sodium 2.43976	Alumina 0.00009
Bicarbonate of Soda 0.0170	Free Carbonic Acid 1.94435
Chloride of Calcium 0.01134	Boric Acid Remarkable trace.
Bicarbonate of Calcium 1.15182	Iodine Trace.
Bicarbonate of Magnesium 0.39586	Organic Acid Trace.
Silicic Acid 0.19900	

From the above given result of the analysis, we conclude that this water belongs to the class of mineral, alkaline waters. The water is effective to cure consumption, chronic catarrh of throat and wind pipe, all complaints of liver, stomach and intestines, catarrh of bladder, rheumatism's superabundance of blood &c.

As this water contains salt, it is very good to drink, since salt stimulates the secretion of gastric juices, appetite and operation of stomach.

In drinking this water, one should begin with small quantity, say 200 to 400 grains a day taking in one doz 60 grains, gradually increasing up to 1,000 grains a day. The best hours for drinking is between breakfast and supper. After taking in the water one should take a walk in good degrees.

A JAPANESE LABEL.

well equipped for compounding all kinds of medicaments—not only mixtures and lotions, but tablets, ointments, and other forms. Besides, they stock and sell surgical dressings and medical and surgical apparatus generally. The consequence is that patients do not dream of getting prescriptions dispensed by pharmacists, and consider it more convenient that the doctors who attend them should supply the physic.

What, then, does the Japanese pharmacist get to do? A proper question to ask, and the reply is that it is the pharmacist's business to supply physicians and surgeons with the medicines they require, but he does not keep a dispensing department.* It is more important to him, and better business, to push the sale of proprietary medicines, as the demand for such preparations by the Japanese people is so great that it cannot be calculated. There are a few reliable remedies among them, but most of them are without efficacy and worthless. A single article is put forward as a remedy for all diseases. There is one which is said to be marvellous and effectual in dyspepsia, Bright's disease, pneumonia, female troubles, fever, adenoma, and acromatopsia.

* Since this was written I have great pleasure in learning that a pharmacist has been engaged to dispense the prescriptions of the Medical College of the Imperial University, Tokyo, and the dispensary will be open to the public.—THE AUTHOR.

Some quack remedies are compounded from startling ingredients. The makers burn the dead bodies of snakes, rats, mice, insects, even the skull of man into charcoal, powder it, and compound into their "marvellous" remedies. The Kotsu Shrine at Osaka is a centre for these proprietary-medicine stores. The writer has had personal experience

NOTICE.

Our store was found three hundred years ago just when Tokyo has come to exist as a city. We sale all kinds of medicine and drugs as well as "Kin Taiyen," the first discoverer of which is our ancestor: it is specially effectual as stimulant and febrifuge and has good reputation throughout the country. As Japan is going to have a world-wide name, it is our earnest desire to make our business the world-wide one, and to import the special medicine, toilet, spirits and provisions. If there is any person or firm in Europe and America, that desires to have a good sale of those articles above mentioned, in Japan, give us a notice: we will work as his or their agent on reasonable terms and propagate the sale for him or them advertising on the Sanitary Journal and other vernacular periodicals.

K— R— Drug Store,

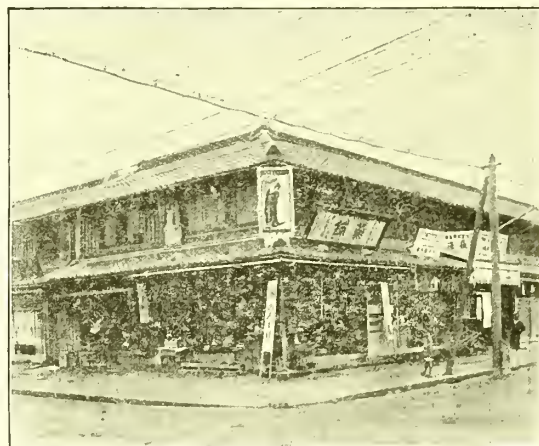
Shitaya, Tokyo, JAPAN.

Proprietor: Shima Daisuke, the Sixteenth Successor

A JAPANESE DRUGGIST'S ADVERTISEMENT.

of such medicine-compounders in days gone by. "When," he says, "I caught a crow I sold it to a Kuro-yaki-ya (literally black-burning-store) knowing that it would be made into medicine. This may seem curious and amusing to the European reader, but it is a fact." But the practice of medicine in Japan is advancing as it advances in Europe, only the old is alongside it, just as Japanese drive automobiles and travel in steamers and railway trains, as well as in *jinrikisha* or *kago*.

The outward appearance of Japanese pharmacies is very gloomy and dark, because they are in low bungalows with



A YOKOHAMA PHARMACY.

One of the brighter and better-class Japanese drug-stores.

grey overhanging roofs, and no show-window or internal fittings such as the writer has seen in America. Most of the stock is kept in drawers, and there are few glazed cases. The shop is in the charge of a *banto*, or assistant, who is rarely seen without a smoking pipe in his mouth, and the other persons employed, or to be seen in the shop, are usually dull and tired looking.

There are several schools of pharmacy in the country, such as the department of pharmacy in the Medical College of the Imperial University, and other pharmaceutical academies and schools. The graduates from these do not

open pharmacies of their own, as almost all of them seek positions in medical schools or in Government offices. The subjects of the qualifying examinations for pharmacists are similar to those given in Europe and America, and include physics, chemistry, and other pharmaceutical sciences, arithmetic, laws and regulations governing the practice of pharmacy, and the art of dispensing. There is no special work for such graduates to do; their calling is not protected, and anyone who gets a licence from a local governing body (without examination) can open a shop for the sale of chemicals and drugs. This does not, of course, apply to the position of pharmacist in the army, where the highest qualification is required. The army pharmacist is treated and paid well, and can rise to the rank of colonel. The uniform is the same as that of field officers, surgeons, etc., and has green facings, but the combatants wear gilt shoulder-straps, while those of pharmacists and others are silver. The caps of all are trimmed with scarlet.

Adulteration of drugs is universal in Japan, and druggists are not ashamed of it. Japanese druggists do not stock soap, toilet-articles, photographic apparatus, or surgical instruments. The medical-apparatus store is quite a different line of business.

The Japanese make all descriptions of ware for medical and surgical purposes, but they are more brittle than the foreign-made articles.

Chemicals and drugs, except those made in the country, are imported chiefly from Germany. Inspection of such imports is carried out, but it is very imperfect, and there are many directions in which it might be improved.

[The label and advertisement in this article are introduced by us to illustrate what Japanese chemists are doing, and are independent of what is said by the author of the article. —THE EDITOR.]

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

PARKE'S DRUG-STORES, LTD., are opening a new branch at 226 Upper Richmond Road, East Sheen.

MESSRS. BISHOP & Co., chemists, have relinquished their business at 12 High Street, Harlesden, N.W.

MESSRS. DAVIES & DAVIS are about to open a chemist's business at 6 Markhouse Parade, Lea Bridge Road, Leyton, E.

MR. J. HODGE, chemist and druggist, has purchased the business of Mr. T. Jenkyn, chemist and druggist, at St. Ives, Cornwall.

BISHOP'S DRUG-STORES, 460 Holloway Road, London, N., have opened a photographic branch at No. 466 in the same thoroughfare.

MR. JAMES BUCKLEY, chemist and druggist, of Mossley, near Oldham, has sold his business to the Thompson Drug-stores Co., Ltd., Ashton-under-Lyne.

MR. A. J. DYER, pharmaceutical chemist, has removed from 6 Acre Lane, Brixton, S.W., to newly erected premises at No. 8 in the same thoroughfare.

At last Saturday's sitting of the Royal Court of Jersey, Mr. Ernest Ahier, chemist and druggist, formerly of Bromley, Kent, obtained leave to practise as a chemist and druggist in that island.

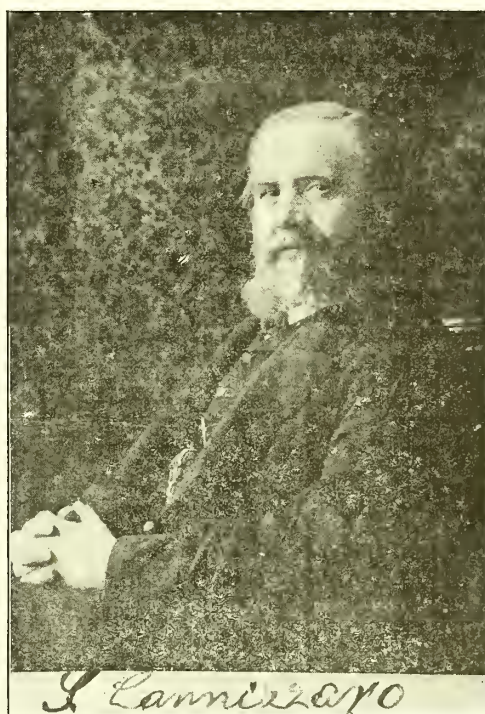
MR. JOSEPH ROBINSON, chemist, of 23 Charnwood Grove, West Bridgford, Nottingham, is opening a pharmacy at Skegness (next door to the G.P.O.), with stationery and fancy goods departments added.

MR. J. W. NORMANSELL, pharmaceutical chemist, has sold his business at 59 Bridge Street, Chester, and 6 Walker Street, Hoole, Chester, to Mr. William Pattinson, chemist and druggist, Morecambe, as from March 30, 1906.

THE EXPORTS OF MONAZITE sand from Brazil during the nine months ended September 1905 amounted to 3,264,790 kilos. (valued at 74,120*l.*), against 3,259,880 kilos. (valued at 73,025*l.*) during the corresponding period of 1904.

Applied Chemistry.

ON Wednesday evening of this week the sixth International Congress of Applied Chemistry was inaugurated in Rome by a reception of the delegates from all countries. This was a perfectly informal gathering, for the official opening did not take place until Thursday. A special representative of this journal is attending the Congress, he being one of the influential party of British chemists who have gone to Rome with the object of arranging for the seventh Congress to be held in London two years hence. Meanwhile we may say a word regarding the Honorary President of the Congress, that world-renowned chemist, whose portrait we give. Professor Stanislao Cannizzaro, F.R.S., Hon. F.C.S., was born in 1826 at Palermo, where his father was the Sicilian Chief of Police. He studied medicine at Palermo and Pisa Universities from 1841 till 1846. He took part in the Sicilian revolution of 1848 and fled to Marseilles, then to Paris in 1849, where he continued his studies. In 1851 he was appointed Professor of Physics and Chemistry in the National College, Alessandria (Piedmont), and since

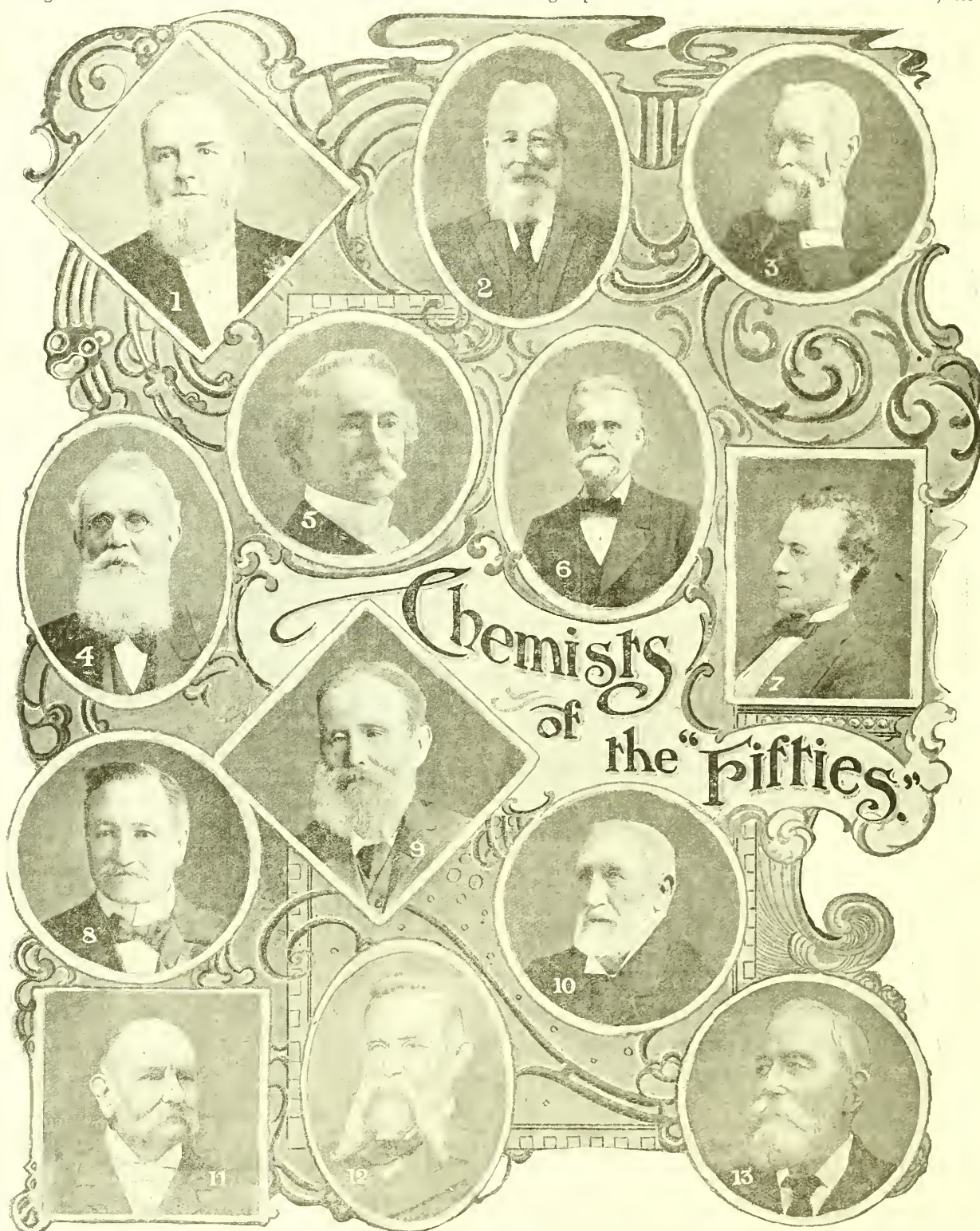


then has held the professorships of chemistry in the Universities of Genoa (1855-61), Palermo (1861-71), and Rome (from 1871). He is now Professor of Chemistry and Director of the School of Pharmacy of the Royal University of Rome. Cannizzaro's name is indelibly associated with studies of the atomic theory and expositions of Avogadro's hypothesis, but it is natural that THE CHEMIST AND DRUGGIST should note especially his work in pharmaceutical chemistry, which includes studies of the constitution of alkaloids, of santonin and santonic acid, and of organic esters. Cannizzaro was the second Faraday lecturer of the Chemical Society (1872), and the subject of the address which he gave then was "The Limits and Form of Theoretical Instruction in Chemistry." He is the oldest honorary member of the Chemical Society, having been elected in 1862. He is a Copley Medallist of the Royal Society. Our portrait is from a signed photograph which we received from the professor a few days ago.

Anglo-Australian Chemists.

By the title we mean those who obtained their education or early experience in the Old Country, and afterwards migrated to one or others of the Australian Colonies.

For the group which we reproduce on this page we are indebted to "The Chemist and Druggist of Australasia." The group does not exhaust the veterans of Australia, nor



1. Wm. Witt, J.P., Prahran (now Flinders Street, Melbourne). 2. Wm. Neilson, Kensington, Vic. 3. Henry Brind, Ballarat.
4. J. Christopher, Clifton Hill, now Fitzroy North, Vic. 5. W. H. Malyn, Ballarat. 6. W. H. Birks, Adelaide. 7. James Parkinson, F.C.S., Adelaide. 8. John Chas. Jones, Richmond, Vic. 9. Ferdinand Duval, Narandera, N.S.W.
10. Wm. Eytan Marsh, Bacchus Marsh. 11. J. G. Bloore, Ballarat. 12. T. B. Abbott, Sale, Vic. 13. Thos. Hackett, Brunswick, Vic.

are notes available for each of those now depicted, but nothing could be more appropriate for a Colonial Issue of **THE CHEMIST AND DRUGGIST** than these reminders of the part played in the advancement of Australian pharmacy by men from the Old Country.

WILLIAM NEILSON (portrait 2) was born in Dublin on December 2, 1832, and shortly after attaining his majority went out to Melbourne, where for sixteen years he was on the staff of Messrs. E. & M. Keogh, wholesale druggists. There he purchased and carried on the retail business of Murphy & Co., Lonsdale Street, Melbourne. He sold out at the end of twelve years to take a trip home, which accomplished he returned and commenced business again in Newmarket, retiring in May 1905.

HENRY BRIND (portrait 3) was born in Codford, Wilts, and went out to Victoria in 1852, returning here in 1859 to study dentistry in the Dental College, Soho Square, London. He returned to Ballarat three years later, and in 1867 opened a pharmacy of his own in Sturt Street there. He was a member of the Pharmacy Board, Victoria, from 1877 to 1897.

W. H. MALYON (portrait 5) was born in England in 1830, and as a boy of twelve sailed as a cadet in the East Indiaman *General Hewitt*. When the ship reached Sydney, N.S.W., the commander apprenticed the cadet for five years to Messrs. Ambrose Foss & Co., wholesale apothecaries and druggists, at the end of which time Mr Malyon was an assistant to a doctor for a year. In 1850 he went to California, and was an assistant for six months to Mr. Thomas Bevan, San Francisco; there he did some adventurous prospecting, and in 1851 and 1852 made two trips to England, finally going out to Australia again at the end of 1852, and since 1855 he has been in business in Ballarat.

WILLIAM HANSON BIRKS (portrait 6) was born in Manchester on December 23, 1841, and in 1853 went out to South Australia with his father (a doctor), who was killed in January 1858. In December of that year Mr. Birks started in business at Angaston, S.A., and after various changes finally settled in Adelaide in October 1874, where he has been since.

JAMES PARKINSON, F.C.S., F.G.S. (portrait 7), went out to Australia from the Old Country in 1852, at the age of twenty-one, and for ten years was in practice as a chemist in Adelaide, S.A. He was then analyst to the Government. Then he came back to London, and from 1863 to 1865 studied at the Royal College of Chemistry under Hofmann, and also at the Royal School of Mines. He devoted twenty-four years to study and travel, and did not return to Adelaide until 1886, when he was appointed city analyst. He is now on a visit to England.

JOHN CLARK JONES (portrait 8) was born at Hay, Brecknockshire, in 1829, and in 1844 was apprenticed to Mr. Charles Rogers, chemist and druggist, Leominster. After that he held situations in Cowbridge, Carmarthen, and Shepton Mallet, sailing for Port Phillip in 1852. In 1858 he started business at Richmond, Vic, and in 1883 bought the pharmaceutical part of Mr. J. Bosisto's business. He was a member of the Council of the Pharmaceutical Society of Australasia for fifteen years, and a Vice-President of the Society. He is still in harness.

FERDINAND DUVAL (portrait 9) was born at Exeter on September 26, 1832, and in 1846 was apprenticed to Mr. J. S. Purlens, apothecary and surgeon, there. He left Plymouth for Adelaide in 1849, and since then has had experience in gold-digging, pharmacy, and general storekeeping. He is registered as a pharmacist in New South Wales, Queensland, and Victoria, and has been in business at Narandera, N.S.W., since 1879.

WILLIAM EYTON MARSH (portrait 10) was born in the neighbourhood of Newbury, Berks, on November 6, 1830, was educated at Rugby School, and was apprenticed to Mr F. Davis, chemist, Newbury. The gold-fever took him out to Australia in 1851 with a brother, and after a year at digging he was so ill that a doctor took charge of him, making use of his pharmaceutical skill during his convalescence. The doctor opened a tent as a chemist's shop in Castlemaine, and Mr. Marsh was put in charge, afterwards buying it, but the gold-fever caught him again. It soon abated, and since then Mr. Marsh has stuck to pharmacy and doctoring, thirty years being spent at Newstead, near Castlemaine, and the last fourteen years at Bacchus Marsh.

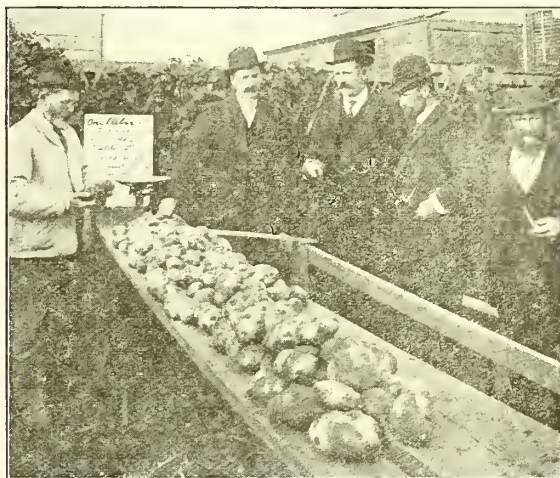
J. G. BLOORE (portrait 11) was born in Birmingham in 1837, and served his apprenticeship there. He went out to Australia in 1857, and after varied experience settled in Ballarat in "the happy days of pharmacy, when cutting grocers did not trouble, dispensaries had no place, and woman, lovely woman, did not consult drapers' lads upon the action of Blaud's pills at 10*d.* a gross." Mr. Bloore is lively at seventy-four, and says he is the happy possessor of the first *Diary* published by **THE CHEMIST AND DRUGGIST**.

THOMAS HACKETT (portrait 13) was born in Lincolnshire on December 13, 1833, and served his apprenticeship at Spalding. He went out to Melbourne in 1855, and served as an assistant there for about two years, when he commenced business as

Brighton in 1858, and remained until 1860. He then bought a business in Simpson's Road, which he sold in 1871. Buying a business in Bourke Street E., he stayed in the city for seventeen years, but again sold out and opened a new business on Sydney Road, North Brunswick, which he still carries on.

A Colonial Side-line.

CHEMISTS are not without their hobbies, and sometimes they succeed in turning them to profitable account. Of such is Mr. Russell Kidd, Launceston, Tasmania, who has recently made a world-record in the production of a new



GROWN FROM ONE POTATO WEIGHING 2 oz.

Mr. Kidd is the second figure from the left.

potato—the Gem of the South. The evolution of a new potato means, we understand, experiments in fertilisation, the crossing of variety with variety until something quite novel results. Mr. Kidd experimented for over ten years, until the Gem of the South was born in March 1904, when



THE GROWTHS FROM ELEVEN DISTINCT SETS.

The gentleman with the fork in his hand is a brother of Miss Ada Crossley; the second from the left of him is Mr. Kidd.

he dug up from his seedling a root with tubers weighing 4½ lb. One of these tubers, weighing 2 oz., was cut into eleven sets and planted. The crop from this weighed 62 lb. 11 oz., or 501 times the weight of the seed-tuber,



THESE photographs are reproduced to show the differences in styles of chemists' shop-fitting which are to be found under the Union Jack. The first two are the interior of a pharmacy away in the far West of Canada, where the style is distinctly *sui generis*, the nice light effect being secured by the large French windows and the front-glazing of the counter-cases. The pharmacy is worth \$20,000, and its annual turnover is much more than that. The central picture is from a postcard recently sent to us by Messrs. A. G. de Silva & Co., Medical Hall, Port of Spain, Trinidad. It is the interior of their place of business, and has many of the characteristics of pharmacies common to Latin

America. The pharmacy of Messrs. C. E. Gardner & Co., Petty Street, Port Elizabeth, Cape Colony, has nothing foreign-looking about it—it is essentially English in style. This also is seen in the interior of Messrs. K. James & Co.'s pharmacy, situated in the basement of the Union-Castle Steamship Co.'s buildings, Port Elizabeth. A correspondent tells us that it is the most attractive pharmacy in town, on account of its unique situation below the level of the street and being handsomely fitted up. The proprietors are Mr. Kirby James, chemist and druggist, from Beverley, Yorkshire, and Mr. D. E. F. McNaughton, from Dundee.

Our Town Traveller

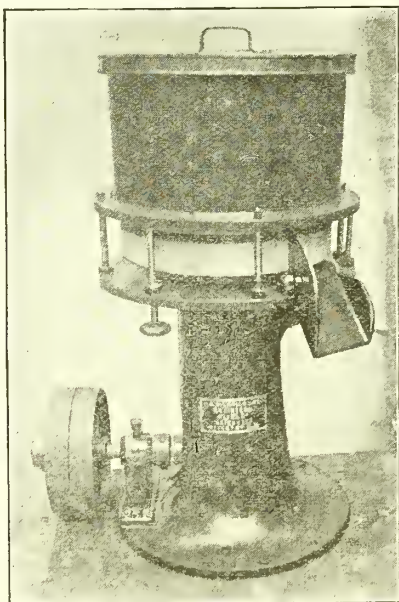
has been out of Town and tells what he saw on his journey as well as in Town

ALTHOUGH it is generally agreed among wholesalers and retailers alike that the general state of trade is improving, there is the invariable reservation that the improvement is slow. The natural impatience of a fast-living age may account in some measure for the want of calmness and the lack of practising the cardinal virtue of Job, but probably the alternations of summer heat and midwinter cold may have some retarding influence on commercial affairs. Colonial trade (with perhaps the exception for the moment of South Africa) is being eagerly looked forward to, and there are ever-increasing evidences of sound reason for the hopefulness in the number of Colonial orders that are coming to hand. Not only in the Metropolis is the Colonial and Continental influence felt; for within the past few weeks I have been meandering in Leicestershire, and in every wholesale and manufacturing house which I entered—and they were not a few—I saw many actual orders packed, or ready for packing, for our Colonies and dependencies beyond the seas.

In the town of Leicester, one of my first visits was to the engineering-works of Messrs. S. W. Wilkinson & Co., in Clyde Street. The first thing that caught my eye on entering was a large packing-case labelled "Bombay." The case contained, Mr. Wilkinson informed me, one of the new patented

"SPEEDY" OINTMENT-MILLS

made by his firm, which are already attaining a vogue at home and abroad. No fewer than sixteen of these machines had been sold since November, and as they cost 50*l.* each manufacturers do not buy them for fun. Two had gone to Australia, and others to the Continent, while various towns in England and Scotland had been supplied, and others were on order. This machine, an illustration of which we give, is



a combined mixing and grinding mill for ointments, pastes, paints, etc. I saw the machine in actual work on a batch of white-precipitate ointment in the laboratory of Messrs. T. Howard Lloyd & Co., and can speak as to the excellently smooth and velvety finish which it gives to an ointment. White precipitate is not an easy ointment to manipulate, but the finished product was like well-made cold-cream. This is attained, Mr. Wilkinson contends—and I am not prepared to disagree with him—by the supplementary grinding process he has introduced. The ingredients for the ointment are thrown promiscuously into the porcelain-lined hopper, the

copper lid is placed on top to keep out the dust, and the porcelain propeller is started, which has a peculiarly weird mixing-motion. When properly mixed a clutch is slipped into gear, causing two marble millstones to revolve, the ointment drops from the hopper down between the two stones, and is ground between the flat surfaces before being discharged down the side-spout into the receptacle waiting for it. The ointment does not come into contact with any metal surfaces, therefore mercurial or acid ointments may be prepared without fear of contamination; and the mill is so simple in design that it can be cleaned in five minutes. It stands about 3½ ft. high, occupies about 3 sq. ft. of space, weighs about 4 cwt., and may be driven by ¾ h.p. The speed of the pulley is 250 revolutions per minute, the capacity of the hopper is 7 gals., and the output is 40 lb. to 50 lb. of ointment per hour. Messrs. Wilkinson & Co. are specialists in pharmaceutical machinery of all kinds. Their pill-machines and tablet-machines are well known in the trade, and their new automatic capsule-making machine (one of which I saw doing fine work in Messrs. John Richardson & Co.'s laboratory) is so appreciated that Continental manufacturers are ordering it. Mr. Wilkinson was in Berlin a short time ago fitting one up for a large German manufacturer, and America herself has ordered several of the Wilkinson machines. Besides the machinery mentioned, an emulsifier which works on the turbine principle is popular, and machines and moulds for making horse-balls, perles, and capsules are to be seen in all sizes and varieties.

Just round the corner, in St. James's Street, I found the fine building of Messrs. T. Howard Lloyd & Co., where Mr. Howard Lloyd himself welcomed me. I had a cursory glance at the new instrument-room, fitted up for the convenience of doctors and chemists, before we set out on an inspection of the six finely lighted, clean, neat, and spacious floors where the preparation of

PILLS, TABLETS, AND PHARMACEUTICAL SPECIALITIES

is carried on on a large scale. We first visited the dry-room, then the sundries department, where lints, wools, glass bottles, boxes, dried herbs, and a selection of medicinal proprietaries are stored. "We have no room for patents," said Mr. Lloyd; "our space is too valuable for such unremunerative products, so we keep only such proprietary medicinal preparations as chemists and doctors may require for dispensing." But the reputation of the firm was evident in the bustle and high pressure which prevailed in the rooms devoted to pill and tablet making. In the pill department several machines were hard at it rounding and finishing the pillular products evolved by manipulation in the machinery of Pindar, Pfeiderer, and Colton. The very latest Colton machine, with feeder, was busily throwing out little liver-pills, and it was eloquent of the advance in scientific pill-making and labour-saving since the earlier days of Pindar. One machine is used exclusively for Bland's pill, and I had an opportunity of examining the nice, soft, green, pliant, and evenly mixed Bland's mass that Mr. Lloyd prides himself on, and on the keeping properties of which the reputation of the house has been staked. When it is considered that the output of pills at the Howard Lloyd establishment is reckoned at tons per month it will be understood that great care and periodical testing are necessary to secure uniform results. In the pill stock-room beautiful examples of pearl, sugar, and gelatin coatings are to be seen, and the various shapes (round or oval) and colours of coating are noteworthy. The making and filling of capsules by machinery and by hand are carried on on another floor, and more examples of ingenuity in mechanical aids to the pharmacist are seen in the tablet-making department. There four machines—two Coltons, a Sudworth, and a Wilkinson—were at work, stolidly turning out finely finished tablets of effervescent bicarbonate of soda, effervescent Carlsbad salts, effervescent lithia, and cascara sagrada. Speed, accuracy, and good finish are characteristics of these machines. The ointment-mill

already referred to and an emulsifier were duly inspected, and an interesting itinerary was concluded with a look at the export orders for Zanzibar, Krishna, Cashmir, and other foreign places, in the packing and despatch department on the ground floor, and with a glance at the printing department (where some creditable wrappers and labels for the Howard Lloyd counter-specialities are turned out), the millhouse in the yard, and the wet-room in the basement. [Since our Town Traveller visited Leicester Messrs. Howard Lloyd have sent us a copy of their new net price-list, which readers should write to the firm for.]

An agreeable half-hour in the quaint reception-room at 40½ Belgrave Gate, in company with Mr. Cholerton, of Messrs. A. de St. Dalmas & Co., disclosed many interesting facts. We talked of the rapid and increasing development of the

BUSINESS OF PLASTER-MAKING

which has made the name of St. Dalmas famous at home and abroad; and Mr. Cholerton, after admitting with becoming modesty that his firm were fairly taxed to keep pace with Home and Colonial requirements, reverted to the initiation of the business. He informed me that the room in which we sat—a nicely furnished business-looking apartment—was once the kitchen of Mr. Moore, who was the first man in this country to spread plasters by machinery. He opened for my inspection peculiarly shaped oven-like receptacles, where, it is conjectured, the original plaster-maker prepared and probably finished his products, and we drifted into a philosophic reflection on the enormous strides that had been made in the industry within recent years. The elegant preparations of modern times, with the endless variety and developments therefrom that have accrued, would have given pause to the ingenious inhabitant of the St. Dalmas domicile in the days that have gone, as the scientific accuracy necessary (and always evident in the St. Dalmas products) would have taxed his chemical and pharmaceutical skill.

None of the commercial buildings in Leicester—and there are not a few—are more imposing externally or have better-fitted interiors than that of Messrs. John Richardson & Co., Leicester, Ltd., in Friar Lane. There I had a long chat with Mr. Hubert Richardson, who has returned in vigorous health to hard work, after some years of health-seeking on the Continent. But the years which Mr. Richardson has spent hunting art-treasures in Italy, Germany, and France have not dimmed his keenness for the interests of his historic house and the

TREND OF PHARMACEUTICAL AFFAIRS.

He deprecated the cut-throat competition which is characteristic of modern business methods; and although he admitted no falling-off in the business done by his well-established house, he showed that Richardsons are not content to rest upon their laurels, but are pushing onwards more strongly into pastures new. The Colonies are being exploited more and more, and high hopes are entertained of a consequent reward. Two specially built trunks, containing a variety of the very latest products of the Richardson factories, were in process of repletion; and subsequently, under the guidance of Mr. Lewis Ough, the general manager and a well-known pharmacist, I saw many of the actual cases and most of their contents. These included nicely put-up samples of Thymolodyne soaps, coal-tar soaps, carbolic soaps, flexible gelatin capsules of santal oil, salicylate of colchicine, perles of turpentine, cascara, creosote, etc., of diversified colours and sizes, all made hard to suit warm climates; capsules of antifebrin, and so forth—all in nice fancy show-bottles. There were a series of preparations for human beings and another for animals. The veterinary preparations—dog pills, granules, ointments, etc.—like the others, are all nicely and attractively packed, and are so fixed up that they may be displayed to advantage in any showroom for the delectation of Colonials in all parts of the world.

I looked in at the premises of the Wand Manufacturing Co., in the Haymarket, but was not successful in catching Mr. Wand. A short chat with the manager of the retail department of the business, however, convinced me that there was no grumbling for lack of employment either in the wholesale or in

THE RETAIL.

The demand for coated pills is by no means on the wane, and the "over the counter" business shows steady progress. With regard to local conditions of trade I gathered in the course of pleasant converse with several well-known pharmacists in Leicester that the town is emerging from a period of trade depression. The staple industries of Leicester, as every schoolboy knows, are boot-making and the manufacture of hosiery, and during the past few years both these trades were slack at the same time. This is a state of things which Mr. Walter Rowe, of Granby Street—the shrewd President of the Leicester Chemists' Association, and a Leicester man born and bred—told me he never before had experienced. Usually if one of the industries is depressed the other is busy, and the balance of things is maintained. However, there is a general agreement that matters are improving, and the pendulum is slowly returning to "prosperity." The fine new shop which Evans Sons Lescher & Webb, Ltd., of Liverpool and London, have fitted up for Mr. F. W. Goodess, in Market Street, clearly indicates that Mr. Goodess has faith in the future. Mr. Goodess, as we intimated some weeks ago, had to remove from the shop in Friar Lane, where he had been in business so long, but he is now well satisfied with the change, and speaks enthusiastically of the complete, prompt, and elegant manner in which the Liverpool firm have done his fitting. The fittings are plain and good, thoroughly up to date, and indicative of the character of the snug dispensing and family business which is done by Mr. Goodess. The successor to Mr. Goodess in the secretaryship of the local Association is Mr. George E. Marfitt. I found Mr. Marfitt busy as ever, but ready in quiet intervals to talk cricket, football, pharmaceutical politics, and the general trend of the drug-trade with equal impartiality and conviction. I learned that Mr. Marfitt, like Mr. Goodess, will be compelled shortly to vacate the shop he has been in for about ten years, in Infirmary Square, for another which he has secured at the opposite corner of the street. A notable pharmaceutical family is that of Mr. Joseph Young, of Gallowtree Gate. Mr. Young is not only a pharmaceutical chemist and analyst of distinction, with one of the best-class retail businesses in the town, but he has been successful in transmitting his pharmaceutical genius to his sons—no fewer than three of whom are pharmaceutical chemists, and all had brilliant careers at the Bloomsbury Square School. Mr. Young, sen., is gradually retiring from the business in which he has done so well and trained so many good men.

Perhaps the most enjoyable of my visits to Leicestershire, at any rate from an æsthetic point of view, was to the

HOME OF ZENOBIA

in Loughborough. Not so many years ago Mr. W. F. Charles, then a chemist in business in the Market Place, Loughborough, read a little paragraph in *THE CHEMIST AND DRUGGIST*, which set him a thinking. Many other chemists have done the same by studying the *C. & D.*, and have, like Mr. Charles, been placed on the road to fame and fortune. The particular advice which Mr. Charles beheld to be good was an exhortation to chemists to take up the question of insect-destroying on plants more seriously. He took the advice to heart, evolved an insect-killer (which he registered under an appropriate name), and developed a considerable business in horticultural necessities. He studied the question thoroughly from an entomological point of view, made practical experiments to gauge the exact line of demarcation which secured the death of the insect without the destruction of the plant, and prospered accordingly. His researches brought him into contact with the first horticulturists of the Kingdom. He corresponded with head-gardeners to historic and aristocratic families, and ultimately, having destroyed the insect, became interested in the flower. The quest of flower-scents came in natural sequence, and the genesis of "Zenobia" was an order for a consignment of violet essence to be used by a London firm of florists for perfuming the scentless violets that are sometimes sold at certain seasons of the year in the streets of the Metropolis. The success of the violet-odour brought others in its train, and ultimately pharmacy was abandoned for the more fascinating pursuit of elusive flower-perfumes. Since then "Zenobia" sweet-pea and other odours have been

synthesised by Mr. Charles, and his latest productions, still in embryo, are a series to be known as the "Soverina" and another as the "Charmol." The "Soverina" will be a very high-class perfume-concentrate to sell at 10s. 6d. per bottle, and the "Soverina" toilet-soap will be 3s. 6d. per tablet. After two years' experimenting with soap-manufacture Mr.

Charles has now perfected his system of toilet-soap making, and "Charmol" soaps and "Trefle" soaps in 1s. boxes (4d. per cake) will give chemist and customer alike complete satisfaction. There will be 6d. and 1s. shaving-sticks in both series. These soaps are beautifully milled,

have a soft base, and are all superfatted with a wool-fat. The style of the "Zenobia" toilet-soaps is as distinctive as their character and odour. The wrappers are in blue and gold on a white ground, and the double blue-and-gold border with chaste label in the centre of the white ground on the lid of the box gives the whole get-up a distinction of its own. The effect is indicated—somewhat feebly, I admit—in the accompanying black-and-white illustration.

In the metropolis business is slowly but surely "picking up." Preparations for the summer trade are everywhere in evidence in spite of the fact that Arctic weather comes in occasional gusts and prolongs the cough-mixture and chest-protector period. Effervescent-salines, health-salts, and blood-purifiers are gradually superseding winter goods, and the retailer is looking to his stock of

AERATED WATERS.

In this connection I journeyed to Upper Edmonton this week in company with a party of London and provincial chemists and their wives, and walked over the large works



of Aërotors, Ltd., where "Sparklets," "Sparklet" syphons, and "Sparklogenes" are produced. Some idea of the size of the "Sparklets" factory may be obtained when it is remem-

bered that it covers quite 40,000 superficial feet, and that the company own three acres of ground and employ about 250 workers. Under the able direction of the cosmopolitan engineer and works manager, Mr. Campbell, we went through all the departments (which extend from A to O on the card-index system), and saw everything, from the making to the filling and weighing of the "Sparklet" bulb and the making of the syphons from the bottle onward to the casting of the heads for syphon and "Sparklogene," their finish and their testing. This testing is an important part of the business, and is most conscientiously carried out in all departments. The checks are so numerous and so thorough that it seems almost an impossibility, after witnessing the care taken, that any defective bulbs, syphons, or "Sparklogenes" should get out of the factory. The company manufacture their own gas for driving-purposes, and, of course, have their own electrical installation. They have a fine plant for the production of liquid carbonic-acid gas, and the process of weighing, filling, and finishing off the bulbs was followed with keen interest. The illustration shows the process of automatically filling and weighing. In the foundry the metal parts of the syphons are separately cast from a special leadless alloy, mainly pure tin. The departments in order file away the roughnesses, clear the water passages, turn them, make the threads and the valve receptacles, clean the castings, and turn them over to be tested and examined. Porosity is guarded against by each syphon head being subjected to a water pressure of 750 lb. per square inch. The heads are then ground and polished and afterwards nickel-plated. In the nickel-plating department there are eight plating vats working from a dynamo having a capacity of eight volts at 400 ampères, and twenty-eight workpeople are constantly engaged in that department. Washing in hot water and a final polishing completes the process of preparation prior to putting all the parts together. Another test—hydraulic pressure to 300 lb. per square inch—is applied to the fitted syphon top before finally passed. Upwards of 2,000 plated tops can be produced daily. With regard to the glass vases, these products of Bohemia are cleaned, then encircled by a red band at some distance from the top (to show where it may be filled up to), the necks are coated with an acid and warmed in a stove; after which the neck-fittings of metal and the wire guards that cover the syphons are soldered together top and bottom. Over 180 wires are used for a single syphon, and the machine which weaves the netting

is a most ingenious one, working something in a fashion of a hose-knitting machine. Mr. Campbell informed me that about 6,000 miles of wire was used by the company last year, and at least 9,000 miles will be used this year. I have no space to go into details of testing the strength of the glass, and of the various packing and storing processes, but sufficient has perhaps been written to give an idea of the resources and development of this important industry. An excellent assortment of "Prana Sparklet" literature and showcards is issued by the company, and chemists should see that they have a stock of these in preparation for the season's trade.

In the spring the housewife's fancy lightly turns to thoughts of

SPRING-CLEANING.

Consequently the chemist has a run on household renovators. In view of stock requiring replenishment, I inspected an assortment of household specialties of this nature in the offices of Messrs. Daniel Judson & Son, in Mack's Road, Bermondsey, S.E. The fame of Judson's dyes is too world-wide to require more than mention, but the firm have now gone in more extensively for mixed paints, enamels, polishes, and like articles. The enamels are all packed in nicely decorated tins to retail at 1d., 3d., 6d., 9d., and 1s., and the range of colours (Post Office red, turquoise blue, azure blue, grass green, and so on, *ad infinitum*), is as com-

plete as the quality of the enamel is satisfactory. With orders for one gross of the three larger sizes of enamels a counter showcase is supplied free. These enamels are produced for a variety of purposes besides furniture; there is a special motor-car enamel, a cycle enamel, "Bathine" (a bath enamel), golf-ball enamel, and stoving enamel. Then there are gold and silver enamels of a distinct character. The sixpenny box of gold enamel contains a bottle of liquid, a packet of bronze, a saucer, and a brush, and is said to be better packed and of better value than anything of the kind on the market. Judson's gold paint and liquid gold are for finer work. A speciality is also being made of wood stains in all shades in 6d. and 1s. bottles, and a wax-floor polish, in 3d., 6d., and 1s. tins, brightens linoleums, furniture, or brown boots indiscriminately and with equal success. "Shooshyne" is a waterproof polish for all kinds of boots which does its work with the minimum of labour and the maximum of effect. It is retailed in 4d. tins. Straw-hat polish, "Blackall" for grates, "Household Ammonia," and ready mixed paints in 1-lb. tins are a few of the other Judson products for which the chemist will find a ready sale. The photographic department may also be strengthened by the addition of a few cabinets (1s. 6d. and 5s. each retail) of photo tints for colouring photographs and picture-postcards. The export trade in the Judson specialities, particularly with Australia, is steadily increasing.

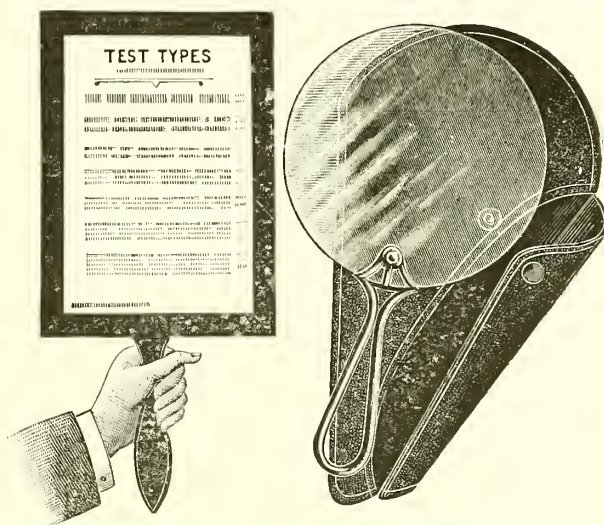
THE RECENT REMOVAL

of Messrs. Henry P. Thompson & Co. from 93 Aldersgate Street, London, E.C., to ground-floor premises in Aldersgate Buildings, quite close to their old location, suggested a call of inspection. When I got to the new place one day this week I found things pretty straight. It is five years since Mr. Thompson started on his own account in one little room, and business has grown with him since, especially as a supplier to cash buyers of large quantities of the goods which he handles, this enabling him to quote special prices. That is the case, for example, with the "W" brand of dispensing-bottles, and "Compressed Emergency" towels, and other sanitary towels for women. The demand for the "Compressed Emergency" has been so unexpectedly great that the firm have not been able to keep pace with it, but within a fortnight it will be possible, Mr. Thompson told me, to deliver any quantity. I also noticed in respect to these and other goods that the firm print retailers' own names on the labels. This also holds good with the "Aseptic Enema" when an order for six dozen is given. This is a seamless black rubber enema of English make with the valve at the end of the rubber tube, so that the nozzle screws on to it, and if the valve goes wrong it is easy to cut off the rubber and insert another valve. The enema is made in eight qualities. Messrs. Thompson & Co. also handle the Davol rubber-goods, which include hot-water bags in what I may call anatomical shapes—*e.g.*, a double one for the side, which is really two bottles with one mouth. These are covered in pretty patterns of flannel. I noticed several novelties in the products from Messrs. Bauer & Black's factories, including suspensories which can be retailed at 6d. or even less. Yet each is packed in its own carton, six or twelve in an outer, all labelled for reference. These suspensories have seamless sacs. Another interesting novelty is the "Rosella" clothes-cleaner, a circular pad which "knocks spots off anything" and may be retailed at as low as 4d. These are put up in showcards in 1 doz., and the firm have the sole agency for this country. Mr. Thompson will be glad to see any old friends of his own or his father's (who is hearty and interested in all that is going on in the drug trade) at the new place of business.

AN OPTICAL FACTORY.

When I call at the factory of Messrs. F. Darton & Co., Clerkenwell Optical Works, St. John Street Road, London, E.C., I am always sure to find some new and interesting items to place before the trade. "How is it," I asked of Mr. Darton, "that your firm is so prolific in turning out scientific novelties?" This was somewhat of a poser, but the answer clearly showed that the principals, having gone through an apprenticeship to the mechanical part of the business, are better able to suggest improvements in particular pieces of apparatus or to appreciate the suggestions made by any of their staff of skilled

workers. Take the case of meteorological instruments, where the patterns of barometers have increased to about a hundred, and the retail dealer has an unequalled choice. The barograph, as representing the highest type of barometer, an instrument which formerly could only be purchased by the rich, is now obtainable at a price that permits it to be profitably retailed at three guineas. This stage of development has only been arrived at by improvements of manufacture involving less expenditure of costly skilled labour. The barograph might more often be used as an attraction to the shop of the scientific-instrument dealer; the patient and never-failing pen, tracing the variations of barometric pressure from hour to hour, cannot fail to provoke remarks from even the most casual observer. A new style of students' microscope, which is destined to sell well on account of its inherent good qualities, was the next instrument I inspected. It is of the erect-image type, stands on a tripod, and is focussed by sliding the telescopic tubes. When collapsed the microscope is about 3½ in. high, and is adapted for carrying about by naturalists for field use. The instrument is made in two sizes—that to magnify twenty times costing 18s., when adapted to magnify forty times the price is 21s.; but the microscopes are distinctly cheap at the price. Turning now to the spectacle side of optics, I was shown a new idea in a reading-type holder. The card of Snellen types is held in a frame of the size and style of a hand-mirror. Perhaps I ought to call this piece of apparatus a hand-mirror adapted for sight-testing, because the reverse side is occupied by a looking-glass. Considering that lady clients are usually given an



opportunity of inspecting the fit of their glasses, or possibly adjusting their dishevelled hair, the idea of combining the test-types and mirror is ingenious and distinctly useful. Talking of spectacles reminds me of the new form of hand reading-glass which Messrs. Darton are introducing to the trade. These hand-lenses are frameless, the handle being riveted to the double convex lens in a substantial manner, and a neat case being supplied with each glass. Motor-goggles are still in process of evolution. One can now buy a decent-looking pair of goggles for 1s., but in higher-priced goggles distinct advances are being made in the direction of comfort and portability. To secure a better fit while being worn, and to make the goggles fit into the minimum of space when not being worn, collapsible sides, on the lazy-tongs principle, have been devised, and are meeting with the approval of motorists, who as a class are, if not progressive in the social sense, rapid movers.

SPECTACLES AND FOLDERS.

When in the neighbourhood of Bloomsbury this week I called at the new offices of Messrs. Bruce Green & Co., Ltd., 14, 16, and 18 Bloomsbury Street, London, W.C., to hear about their system of spectacle-supply. Mr. Bruce Green explained it to me in detail, the following being the gist of his remarks. A beginner in optics sends up Order A,

Order B, or both. Order B consists of a divided case containing twenty-six pairs of "sight-savers," and Order A has, in addition, a like quantity of folders. Order A is the one mostly required, and costs the agent 65s. Each case is divided into two compartments, one holding the far-sights and the other the short-sights, the different strengths of spectacles being in separate divisions. Test-cards are supplied, and, having ascertained whether concave or convex lenses are required, the customer proceeds to try on the spectacles in succession until he finds a pair that enables him to read with ease the smallest type on the test-cards. The strength of lens being found in this way, the measurements of the face are taken if the frame of the trial pair does not fit the face perfectly. The required measurements are written on a prescription-form and transmitted to the office, whence the chemist receives the correct spectacles by return of post. Messrs. Bruce Green & Co. do not recommend their customers to test for astigmatism, but to refer such cases to the local oculist. Instruction-cards are sent out with the first order, as well as a showcase, the latter being intended for display in the shop or window.

Westminster Wisdom.

(From our Parliamentary Representative.)

THE HOUSE OF COMMONS

reassembled on Tuesday after the Easter Recess. Peers are taking a week's longer holiday.

INDUSTRIAL ALCOHOL.

Among the questions upon the order-paper when the House reassembled on Tuesday after the Easter Recess was one relating to industrial alcohol. In this Mr. Cochrane, Under-Secretary to the Home Department in the late Government, asked the Chancellor of the Exchequer whether he could, in the interests of the firms using alcohol for industrial purposes, instruct the Inland Revenue authorities to allow spirits to be received in large tanks, as is done in Germany and other continental countries, thus saving cost of carriage and risk of loss, and whether he could also instruct the same authorities to allow spirits to be denatured at all the distilleries, instead of at the factories at which the alcohol is used. Mr. Cochrane also asked if there were any legal limit to the size of casks which may be filled with spirits at a distillery. Mr. Asquith, in his reply, said: The first two questions were considered by the Industrial Alcohol Committee, and subsequently also by the Board of Inland Revenue. In either case an alteration of the law would be required to allow of the arrangements suggested. But for various reasons connected with the safety of the Revenue it is not considered that the use of tanks for conveyance of spirit which is neither duty-paid nor methylated would be desirable. Spirits removed from a distillery must be filled into casks which must not be of less capacity than nine gallons. There is no maximum limit to the size of the casks.

OPIUM-TRAFFIC.

Mr. John Morley is to be asked by Mr. Jeremiah MacVeagh on Monday what is the value of the opium exported from India last year, what proportion went to China, and what revenue the Government of India derived from the trade.

ALIENS AND INFECTIOUS DISEASES.

A point in relation to the operation of the Aliens Bill in respect of infectious diseases is to be raised on Monday by Mr. Claude Hay. The member for Hoxton will ask the Home Secretary whether, under the new regulations for the administration of the Aliens Act—whereby an alien otherwise liable to rejection on medical grounds is to be allowed to land when prohibition to do so would inflict hardship on him, provided he is free from infectious or objectionable disease—trachoma, favus, and the malady known as "miner's worm" are included in the category of objectionable diseases.

THE METRIC SYSTEM.

An analysis of the disposition of the new House of Commons towards the metric system of weights and mea-

sures has yielded results which the promoters of the movement for its adoption in this country consider favourable, some 250 members having signified their adhesion to the movement. In the circumstances, an effort will be made to bring in a Bill dealing with the subject.

THE COLLEGE OF SURGEONS.

The Prime Minister was asked by Sir William Collins this week whether he would be prepared to consider a petition having for its object a reform of the constitution of the College of Surgeons, with a view to give some voice in the management of the College and its property to members of the College.

VACCINATION.

At the evening sitting on Wednesday Professor Arnold Lupton brought on his motion, declaring "That, in the opinion of this House, vaccination ought no longer to be obligatory on those who regard it as useless or dangerous." This was seconded by Mr. Pickersgill, and warmly supported by Mr. J. M. Robertson. Mr. John Burns, in replying to the debate, stated that the cost of vaccination is increasing so rapidly as to make it a matter of inquiry for the Local Government Board. Between 1899 and 1906 the annual cost of vaccination had increased from 72,000*l.* to 270,000*l.* Mr. Burns promised to appoint a Committee of Inquiry, which would consider, *inter alia*, whether vaccination cannot be performed at a later stage in life, when its consequences might not be so serious. In view of the satisfactory nature of the Government's reply, Mr. Lupton withdrew his motion, which had been under consideration for about an hour and a half.

VETERINARY DEGREES.

The ordinance for the institution of degrees in veterinary medicine and surgery at the Edinburgh University has been published as a Parliamentary paper. The degrees will be bachelor and doctor. Candidates will be required (1) to pass the medical preliminary examination, (2) to go through a four years' curriculum in chemistry, botany, zoology, physics, anatomy of domesticated animals, histology, physiology, stable management and shoeing, equine conformation and manipulation of domestic animals, materia medica (pharmacy, pharmacology, and therapeutics), veterinary hygiene, medicine, surgery, and obstetrics, toxicology and general principles of breeding, (3) be a M.R.C.V.S. or the equivalent, and (4) attend the University or the Royal (Dick) Veterinary College, Edinburgh. The professional examination is to be taken in four divisions corresponding with the year's curriculum.

Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertisement-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street London, E.C.), will be esteemed.

25/67. London agent for a Paris-made toothbrush called the "Up-and-Down."

24/49. What is the composition of "Febrina," made by the Sultan Drug Co., or the address of the company?

A meeting of the Association of Drug-companies, Ltd., was held in London on April 25, when the Poisons and Pharmacy Bill and the Pharmaceutical Society's Bill were the principal subjects of discussion.

ISTITUTO NAZIONALE MEDICO FARMACOLOGICO.—Under this title a new joint-stock company has been registered in Rome, with 1½ million lire capital, for the purpose of building in Turin a factory and head depot for chemical and galenical products. The head office and chief depot will be in Rome after July 1. In a short time the company will probably be able to open branches in various towns. It is said to have united with the Co-operativa Farmaceutico in Milan.

Observations and Reflections.

By XRAYSER.

The Poisons Schedule

of the Government Pharmacy Bill might have been drafted by a Bourbon who had learned nothing and forgotten nothing during the past forty years. The old formulas which seemed exact enough when they were adopted for the Act of 1868 are retained, and no attention has been paid to the legal interpretations which have raised difficulties in the interval. The Armson judgment, for example, which renders the expression "and its preparations" superfluous, has been entirely disregarded. But it is not superseded, and will have to be reckoned with. The amendments which the House of Lords has agreed to have certainly improved the schedule, but it can hardly be possible that this opportunity of ensuring clearness and uniformity will be allowed to pass. An absolutely scientific schedule is, perhaps, not attainable; but the people who wear the boot and know where it pinches could assuredly tell the officials of the Privy Council a few things which even they are not aware of. It is a draftsman's tradition that every schedule must look more or less like all schedules which have gone before it; what is wanted in this one is so much latitude of expression as may be necessary to make the definitions perfectly intelligible.

The Advance of Oxalic Acid

into popular favour as a medium for suicide is startling, and there is good reason for the theory that this poison came into fashion when some little obstacle was interposed to the free sale of carbolic acid. The latter was semi-scheduled in 1901. I find that in the seven years 1894-1900 the average number of suicides by oxalic acid was 37; in 1901 it suddenly rose to 72, fell to 64 in 1902, then advanced again to 89 in 1903, and to 110 in 1904, as shown in the latest report. The mere labelling of a poison cannot have much effect in preventing suicides; indeed, it may be supposed to serve as a guide to those intent on self-destruction. The restrictions surrounding the sale of first-part poisons, and the often vexatious curiosity of the qualified vendor, do undoubtedly exercise a restraining influence. But it is noticeable that in the case of oxalic acid the accidental deaths have risen in the same proportion as the suicides. The average of the decade 1894-1903 was 5.5, the highest figure being 9 in 1902. In 1904 the score reaches 13. Is scheduling a failure, then? The whole table of poisonings is conclusive against that view. Has oxalic acid come into much wider use in recent years? There is no reason to suppose this. The suggestion in last week's article that it is much more generally sold by unqualified dealers than was the case until recently is irresistible. In the circumstances, therefore, vigorous action on the part of the authorised protectors of the public from poisoning will not only be justified, but is imperatively called for.

The Boots Advertisements

are not, as some critics seem to suppose, addressed merely to members of Parliament. Mr. Boot is not spending his hundreds or thousands of pounds only because he is frantically afraid of our Bill. The particular poison he is aiming to instil into the minds of the public is "How these chemists dread and hate Boots, knowing that they cannot compete with them." It would not be artistic advertising to say this in so many words, but the Pharmacy Bill affords an opportunity of suggesting the idea. The public are pretty stupid as a rule, but this deduction lies so near the surface that the advertiser may rely on it being excavated; and he knows that everyone thinks a great deal more of a conclusion at which he has arrived by

his own sharpness than he does of the same proposition hammered into him by an interested party. Then when the heaven is started in the drug department it is trusted to spread to the rest of the business. If Boots sell pills at a small profit, may we not rely, we are expected to argue, that they will similarly supply us with cruet-stands and Gladstone bags? It has been several times proposed that some

Anti-Boots Advertising

shall be undertaken from a fund to be subscribed by the trade generally to repel the aspersions cast on legitimate pharmacists, and to hit back at our assailant—to deny the allegations and to confound the allegator, as it was once expressed. Schemes which depend on the co-operation of ten thousand chemists are inevitably doomed to failure, and in any case the concoction of a counterblast violent enough to satisfy some subscribers and moderate enough to meet the views of others would overtax the literary skill of the most expert ad-smiths. No one likes to take attacks lying down, but how could chemists retaliate on Mr. Boot without playing into his hands; by showing, that is to say, that we do, in fact, dread his competition? It is worth while to consider, however, wherein these

Machine-run Businesses

have the advantage over the old-fashioned individually controlled ones, if they have any. On the face of things it might be supposed that the latter must possess that degree of superiority which would ensure their survival in the struggle for existence. Surely a business controlled by its owner, a pharmaceutical business particularly, must commend itself to customers in preference to one directed from London or Nottingham or anywhere at a distance, and conducted by an imported hireling whose qualifications and previous history are unknown in the locality. As a matter of fact, this advantage is maintained in a large number of instances. Old family connections have been disturbed less, perhaps, by the impersonal system of trading than we sometimes imagine, and where they have been the cause may often be traced to the reluctance of the ancient principals to adapt themselves to modern ideas. But it is with the casual customer—and he is many—that the multi-shop people score. Why does he prefer to go to them? Because he believes they have a fixed and uniform rate of profit, and he is never quite sure about the other shops. There are hundreds and thousands of chemists who charge as cheaply as Boots, and many who charge less. But it must be admitted that there are also many who charge fancy prices, and my friend the casual is never sure which he may strike. He has to be careful of his twopences, so he avoids risks. There are obvious reasons why a uniform tariff among all chemists is unrealisable; but if a really moderate and unvarying one could be framed and some distinguishing mark to indicate the shops where it was observed adopted, a lot of leakage would be avoided.

The Edinburgh Resolution

which affirms that the principal proposal in the Government Pharmacy Bill "is a violation, fraught with public danger, of the fundamental principle of the existing law," and then goes on to declare that the gentlemen there assembled were "not prepared to give uncompromising opposition to a Bill which offers so favourable an opportunity of obtaining" something they want, is what the covenanting forefathers of these opportunists would have denounced as Erastianism. In the old days "no suggestion, combination, allurements, or tenor" was to be permitted to influence the leaguers, or, in fact, did influence them, in their combat. A very moderate bribe suffices to secure the neutrality of the North British pharmacists of this century, and to condone an innovation which they perceive and declare to be "fraught with public danger."

DISINFECTANTS.

The "Sanitas" Co., Lim.,

Exclusive Manufacturers of the
famous Non-poisonous

"SANITAS" PREPARATIONS.

Also Make and Deal in

"Bactox," "Creocide," "Okol," "Soldis," "Pinos,"
"Kingzett's Patent Sulphur Fumigating Candles,"

"Sulphugators," "Formic Sulphugators,"

"Formic Lamps,"

"Formic Fumigators," "Formic Aldehyde"

(40 per cent. Solution, Tablets, and Powder),

Kingzett's Patent Drain Testers, Sheep Dips, Weed Killer,

"Sulphume," and "Burnet's Smoke Tests,"

Patent Preserved Peroxide of Hydrogen,

Carbolic Fluids, Powders, and Soaps,

Eucalyptus Oil, and Permanganate of Potash.

"Sanitas" Pamphlet and "How to Disinfect" Book sent free.

THE "SANITAS" CO., LTD., LONDON, E.

JEWSBURY & BROWN'S MINERAL WATERS.

Ardwick Green, Manchester.

MILO FOOD FOR INFANTS.

QUITE A NEW DEPARTURE!

Based on Science and Practical Experience.

Sample and Pamphlet free on Application to

NESTLÉ & ANGLO-SWISS CONDENSED MILK CO.,

6 & 8 EASTCHEAP, E.C.

G. S. MUMFORD, FARRINGTON RD., LONDON, E.C.

No. 1 Finest Pure CRUSHED LINSEED	19/ cwt.	Finest Pure STARCH POWDER	22/ cwt.
No. 2 Pure CRUSHED LINSEED	18/ cwt.	No. 1 Finest Light Pure PRECIPITATED CHALK	25/ cwt.
Best Cleaned LINSEED (TEA)	18/ cwt.	EPSOM SALTS, E.S.S. Purified, Clean, and Dry	9/ cwt.
No. 1 Finest Pure FULLER'S EARTH (Light Colour)	15/ cwt.	Finest Levigated "WHITE EARTH" (Toilet purposes)	18/ cwt.
Finest Compound LIQUORICE POWDER	7 & 10 lb.	Finest Pure TOILET QAIMAL, SPECIAL	32/ cwt.
Finest Pure LIQUORICE JUICE	10 lb.	Finest ARROWROOT	1/ lb.

2½ per cent. Discount if Cash with Order.

* CARRIAGE PAID to Railway Stations within 200 miles of London
(for allowance made for distances beyond) on a total weight of 112 lbs.
and upwards of above articles. Smaller parcels delivered free on rail
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RANKIN'S OINTMENT.

P.A.T.A., 3d., 6d., and 1s.

The Chemists' Ointment.

The only Effective Ointment.

The Ointment with 30 years' reputation.

IS A PART 2 POISON.

And may NOT be sold by unqualified dealers.

Best terms and advertising matter from

**RANKIN & CO., PHARMACEUTICAL
CHEMISTS,
KILMARNOCK, N.B.**

£10-0-0 is offered for such information as
will lead to the conviction of any
person substituting imitations for

Fletcher's Hydrobromates

Fletcher, Fletcher & Co., London & Sydney.

Editorial Comments.

"Hands Across the Sea"

THE phrase is hackneyed, but there is nothing that better expresses in a line the purpose of the present issue of THE CHEMIST AND DRUGGIST, since its first intent is to promote business between the manufacturers and merchants of the Mother Country and buyers of chemicals and druggists' goods in parts of the British Empire beyond the seas. THE CHEMIST AND DRUGGIST is not a stranger to Greater Britain; alone among the periodicals of the world it unites all the members of sixteen Colonial chemists' societies in a common bond of fraternity and intelligence. This Colonial Issue extends the influence of that union by a wider circulation and especial presentation of the nature of the service which business-houses in the Old Country offer to Colonial buyers. When we ask the attention of the latter to the business announcements in this issue we do not think it necessary to plead British Brotherhood. The chief characteristic of the Briton at home and abroad is that he buys in the best market without favour and with as little sentiment as possible. That being so, it is right to note that the official statistics of the Mother Country and of all her dependencies indisputably prove that Trans-oceanic business-men buy nearly all they want in the Old Country. This is a gratifying circumstance considering that we at home are not destitute of traditional prejudices in trade matters. While solicitous of Colonial patronage, our manufacturers are said sometimes to forget the peculiar conditions of Colonial markets—for example, that an article advertised to sell at threepence-halfpenny in Manchester has at least threepence added to its cost before it reaches Melbourne. But that sort of thing need not be perpetuated. It comes within the growing disposition of home manufacturers to adapt their methods to expansive export trade, and we venture to suggest that such grievances as this are perpetuated because Colonial buyers have not united to show home manufacturers that their goods reach the Colonies with the imprint of home sale conditions. We may also point out that the home agents

of Colonial buyers draw their supplies from the home stocks, whereas by suitable arrangement, which in some cases exists, goods specially packed for the Colonies are obtainable. These remarks, however, are by the way, and really arise from a conversation with a Colonial caller at 42 Cannon Street. There is an appropriateness in the address, for when we first came here forty-seven years ago the premises were known as Colonial Buildings, and in all these years the place has been a central point of information respecting the drug-trade of the British Empire. Many Colonies have been added to the realm during the five decades; pharmacists have gone to seek fortunes in the uttermost parts of the Empire, and they have kept grip of what is going on through the pages of this journal. With recollections, therefore, of two generations of business-fostering we send forth this Colonial Issue as a business-solicitor for the introduction of Colonial buyers to British manufacturers and merchants.

Cod-liver Oil.

THE abnormal manner in which the Norwegian cod-fishery commenced this year, both as to time and quantity of fish caught, has now resulted in an abnormal production of cod-liver oil in spite of the fact that the two closing weeks of the Lofoten fishing yielded practically nothing. We have given details of the fishing week by week, but it is just as well to emphasise the fact that although last year broke all previous records in the production, 1906 has already proved so prolific that all records in the history of the industry are now broken, the total catch (including Finnmarken up to April 14) having been 34,200,000 cod, yielding 31,951 hectolitres of steam-refined oil, and leaving 8,401 hectolitres of other kinds of oil. There is still another six to eight weeks' fishing in the Finnmarken district, but, as a rule, the output is so irregular that it has not much influence on the market. In view of these conditions the prospects are in favour of cheap cod-liver oil during the present year, barring surprises. Last week, however, we had to record a substantial advance in the refiners' quotations, but this was more the result of speculation on the part of two or three large refiners in Norway than to a legitimate consuming demand, and it is exceedingly doubtful if anybody has been compelled to pay the higher range of prices. The situation is, however, perplexing as the result of this speculation, and in order to estimate its actual bearing on the market it may be as well to point out the chief factors which have induced speculators to join in the game of "bulls" and "bears." It will be remembered that the season commenced with finest and steam-refined oil offering at about 65s. per barrel, c.i.f. London, but the excellent output of the catch at Lofoten caused a decline to 60s. During the beginning of March several refiners, having in view the fact that the output was then more than twice as large as at the corresponding period of 1905, and not taking into calculation the chances of stormy weather, based their operations on an imaginary enormous final result of the catch, and although 60s. for a barrel of finest cod-liver oil was already a low quotation, they endeavoured to depress the market. Offers down to 54s. c.i.f. and less were cabled to the principal centres of consumption, and caused considerable annoyance to holders of old oil in Europe and the United States. While selling, for instance, at 54 marks c.i.f. Hamburg, and 70 francs c.i.f. Genoa, these refiners were keenly competing with each other at Lofoten for crude oil at advancing figures. Indeed, we understand they bought unrefined oil at the price they had previously sold the refined product. However, a fortnight's stormy weather at Lofoten, during which practically no fish

were caught, put another complexion on the matter, and the "bears" suddenly became "bulls," and they have since succeeded in driving up the price from 54s., c.i.f. Thames, to a nominal quotation of 75s., f.o.b. Aalesund. They have not as yet been able to induce anybody to pay these higher prices, except in the case of a few weak-kneed Bergen exporters who have been anxious to "cover" their forward sales. "Bulling" the market in this fashion appears ridiculous when it is considered that the output of oil is one-fourth more than at this period last year, that there is a good quantity of 1905 oil unsold, and that the prospects for a further eight weeks' fishing at Finnmarken are good. It is not difficult, therefore, to imagine how this speculation will end; and even if Finnmarken does not in the coming two months yield half as much oil as last year, the final output will be greater than that of 1905. It must not be forgotten also that chemists everywhere have now got a stock of old oil, which was not the case a year ago.

Canadian v. U.S.A. Analyses.

THE investigations of the Bureau of Chemistry attached to the U.S.A. Agricultural Department have deservedly created sensation, but, it appears, little else, and a leading New York journal pertinently remarks:

Backed by the power and money of the United States Government, Dr. Wiley has organised poison squads and analysed foods until he has amassed a lot of valuable information. Dr. Wiley, at the public expense, has learned what to eat, drink, and avoid, but the value of his information to the people paying him, to the public at large, is about the size of a piece of cheese. Every time that the Bureau of Chemistry finds that the public is being robbed, if not poisoned, by some particular adulteration it announces the fact in startling, glittering generalities—without mentioning any names.

Our New York contemporary wants the names. The weakness thus revealed is in curious contrast to the conditions prevailing on the northern side of the American border, where similar investigations have been going on in Ottawa far longer than in Washington, although they are neither so exhaustive nor so sensational. The experiments and reports of the Canadian Inland Revenue Department possess the element which is lacking under the American system—the names of the vendors and of the manufacturers or wholesalers of the commodities reported upon are invariably given. We have had the opportunity of referring to these reports from time to time, when they appertain to pharmacy, and we have now before us Nos. 110-12, which are of that character. The first of these refers to 108

Tincture of alcoholic preparations of ginger prepared by
Ginger. the food-inspectors in the provinces mentioned before. In every instance the name and address of the vendor is given, and the name and address of the manufacturer or furnisher as given by the vendor.

There is no direct indication as to the business of the vendors, but presumably they were druggists, and we have here one of these rare opportunities of determining to what extent the vendors of a pharmaceutical product are the manufacturers of it. We find the proportions to be—

Nova Scotia	...	6	out of 10 vendors were also makers
New Brunswick	7	" 10	" "
Prince Edward Island	...	3	" 10
Quebec	...	5	" 10
St. Hyacinthe	3	" 9	" "
Montreal	...	1	" 10
Kingston	...	9	" 10
Toronto	...	3	" 10
London	...	4	" 10
Manitoba	...	9	" 10
British Columbia	...	8	" 9

It seems from these figures that druggists in the larger cities

buy rather than make, a circumstance probably due to the fact that in brisk city retail trade neither hands nor time are available for manufacturing-work, and fresh supplies are readily obtainable. Of the samples examined 62 were tincture of ginger, and of these 46 were genuine, 2 doubtful, and 14 adulterated in the sense that they were deficient in alcohol. Of these fourteen 10 were supplied by wholesale houses and 4 were made by the vendors. The analytical results comprise specific gravities and percentage of alcohol. Of essence of ginger 23 samples are reported on, but the results do not show the ginger strength; most of the essences were equal to the tincture in alcoholic strength, but four contained only from 27 to 48 per cent. of alcohol, while extract of ginger appears to be in name alone an indication that the preparation is of low alcoholic strength. Only 5 out of 23 were equal to the tincture in this respect, the others ranging from 20 per cent. to 69 per cent., but generally in the neighbourhood of proof. Mr. A. McGill, assistant to the Chief Analyst, in the course of memoranda attached to his report, discusses the proportion of resin in ginger and in the tincture, quoting C. G. Moor, J. Barclay, and F. W. Fletcher among his authorities. He gives the following results from tinctures made on the B.P. plan with three samples of ginger obtained in Ottawa and ground by himself:

Sample Nos. and Hours of Maceration.	Sp. Gr. of Tincture	Distillate less by	Dry Residue per cent.	Alcohol per cent. by vol. — 90.08	Loss of Alcohol per cent. by vol.
I.....20	.8356	.0015	0.260	89.96	0.12
II.....20	.8368	.0019	0.423	89.72	0.36
III.....20	.8362	.0020	0.337	89.95	0.15
I.....44	.8372	.0018	0.328	89.58	0.50
II.....44	.8377	.0012	0.499	89.24	0.84
III.....44	.8371	.0013	0.319	89.46	0.62
I.....68	.8377	.0019	0.284	89.46	0.62
II.....68	.8380	.0007	0.460	88.98	1.10
III.....68	.8381	.0019	0.420	89.33	0.75

The third column gives the difference between the specific gravity of the tincture, and that of the alcohol distilled from the tincture. One would expect this difference to bear some definite relation to the quantity of oleo-resin in solution. It is, however, apparent that errors of experiment introduce variations which greatly militate against the employment of this number as an index to quantity of resin in solution.

An examination of this table shows the following:

1. Ninety-per-cent. alcohol dissolves from 0.3 to 0.4 part by weight of resin per 100 measures of tincture, in about three days, at ordinary temperature.

2. The amount dissolved after the first period of twenty-four hours is very small.

Sample	I.	Dissolved in 20 hours	Dissolved in 68 hours	Difference
Sample I.	...	0.260	0.328	.068
Sample II.	...	0.423	0.499	.076
Sample III.	...	0.337	0.420	.083

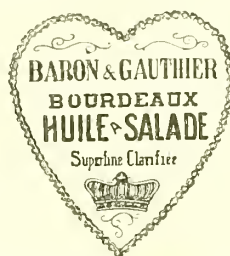
3. Difference in gravity between tincture and distillate gives no satisfactory indication of the amount of resin dissolved.

4. The specific gravity of a good tincture should be about 0.835 to 0.838. Moor quotes the gravity as 0.835 to 0.840.

5. The loss of alcohol in making the tincture need not exceed 1 per cent.

No. 111 Bulletin deals with olive oil, but it seems that the object of the inquiry was to ascertain what is sold as olive oil for culinary purposes. Out of 108 Olive Oil. samples purchased 66 were genuine olive oil, 2 doubtful, 24 were cottonseed oil sold as salad oil, and sixteen the same sold as olive oil. Mr. McGill says that although cottonseed oil lacks the flavour of olive oil, its food-value may be as great, but he very properly objects to the fraudulent manner in which it is frequently sold. Here, for example, are facsimiles of two labels, and there can be no question that the first is used to

mislead, the second being that of a brand of olive oil of high repute:



The analytical results may be summarised so as to show the factors which serve to distinguish clearly between the two oils:

	Olive oil	Cottonseed oil
Refractive index ...	1.4691-1.4710	1.4728-1.4798
Sp. gr. ...	0.910-09.8	0.918-0.925
Iodine No. ...	76.5-88.9	100-113.7
Nitric acid colour test	Green	Brown
Halpen's test ...	No colour	Red

The subject of Bulletin No. 112 is highly coloured confectionery. The chief object in this inquiry was to ascertain whether any of the colours used in manufacturing sweetmeats contain mineral impurity, Confection-ery-colours. such as lead and arsenic. The examination of 111 samples resulted in demonstrating the entire absence of these metals. In only one case was the presence of arsenic shown, but in such very minute quantity as to be completely harmless. Some of the colours dyed wool, others did not, and generally we conclude that the colours used were harmless. In all these cases the names of vendors and manufacturers are given.

B.Sc. (Pharm.).

This proposed degree of the Glasgow University involves a peculiar condition. Candidates for the degree will have to pass the Preliminary examination in general education for degrees in science. This examination is of a higher standard than that for degrees in medicine, hence graduates in pharmacy will be better educated than graduates in medicine!

The Mystery Unveiled.

A passage in our first Editorial of last week has given rise to the suggestion that "Xrayser" and the President of the Pharmaceutical Society are identical.

The Mystery now is disclosed,
The Secret at length is revealed,
The hand of the Master exposed,
And Bloomsbury's blood is congealed.
For years they have writhed in despair,
And Catspaws have tim'rously clawed;
But now that the Secret is bare,
What else dare they do but applaud?

Trouble Brewing.

The mathematical exercises which a contemporary indulged in over the Boots' advertisement reproduced in the C. & D. last week are not likely to be solved without an apology or action for damages. We hear that Mr. Boot considers that the observations amount to an allegation of fraud, as every one of the chemists named in the list was in the employment of the companies when the list was prepared for press, and each one's consent to publication was obtained in writing. If Mr. Boot gets the damages he thinks he is entitled to, those ground-rents or something else as tangible will need to be realised, but there may be a middle way.

"Compositions."

In the revised Schedule of the Poisons and Pharmacy Bill the entry "Poppies, all compositions prepared from" occurs. This is likely to cause trouble. "Compositions" is a new term in this connection. We all know the trouble there has been to get "preparations" defined (even yet it is not altogether clear), and there will be decades of worry about "compositions" if there is no definition of it in the Bill.

Unthinkable.

[A scion of the House of Grosvenor, who is an ex-captain of the 1st Lifeguards, presiding at the annual meeting of the Army and Navy Stores last week, said chemists "desired to disestablish the drug department of the stores and to educate its directors up to the level of themselves."]

The noble lord, in accents bored,
 Declaimed against "these chemist fellows"
 Who stir up wars against the Stores
 And puff the public flame with bellows;
 But never, pharmacist surmised,
 To sharpen store-directors' pains,
 By "education" ill-advised,
 For e'en the tyro recognised
 That first of all there must be brains.

Price-maintenance.

The use by Lord Ebury of this phrase in connection with price-protection, and his statement that 25 per cent. for the retailer is aimed at, show that he had not the P.A.T.A. in mind, but price-maintenance schemes which have been started in larger departments of trade as the result of the P.A.T.A.'s success. It is interesting to observe that the Army and Navy Stores make slightly more than 15 per cent. gross profit all over. In some departments and on some goods the profit is less than that, and in others (*e.g.*, the drug department) much greater, so that the P.A.T.A.'s minimum of 20 per cent. is quite modest in comparison.

P.M.V. and Drug-stores Association.

In a recent note about this body (*C. & D.*, April 14, p. 570) we stated that a debt of 178*l.* had to be wiped off:

It was proposed by Mr. Huntrods (President) to levy 2*l.* 2*s.* per member in order to meet this bill, but Mr. Leggett thought 2*l.* 2*s.* would do, and that 100*l.* could be got together in a week. These figures indicate that the Association numbers less than a hundred members.

Mr. W. J. Leggett writes to deny the deduction, and states that the Association has been spending 200*l.* to 300*l.* a year opposing the Pharmacy Bill, and since the beginning of the campaign has spent 1,000*l.* We gladly give prominence to Mr. Leggett's denial, but would point out that the President's suggested levy of 2*l.* 2*s.* per member to pay off 178*l.* means eighty-one members, and we observe that Mr. Leggett does not supply an alternative figure.

Oxalic-acid Poisoning.

"Xrayser" supplies some interesting details respecting the increased poisonings with oxalic acid, especially since carbolic acid was scheduled. We may further observe that the Patent-medicine Vendors and Drug-stores Association some time ago issued a statement in which the following occurred:

OXALIC ACID, a scheduled poison. During the six years there were 42 penalties recorded throughout the country against unqualified dealers (limited companies excepted), whilst only 6 convictions are in London, 4 of them attributed to the much-abused oilman.

Dr. W. Wynn Westcott, Esq., Coroner for East London, handed in a record to the Poisons Committee of 4 accidental deaths and 18 suicides through oxalic acid in that district during six and a half years.

This is corroboration of our suggestion that the sale of this poison by unqualified dealers is partly responsible for the

increased fatalities. The reports of the Registrar under the Pharmacy Acts do not specify the poisons sold, and in most cases penalties are paid to prevent public proceedings. Perhaps the Registrar would oblige with statistics for oxalic acid during the past ten years. The P.M.V. and D.S.A. figures certainly indicate slackness in London, which could be remedied in a week by sending one or two messengers round oilshops.

The Romans and Poisons.

A very early and interesting reference to the sale of poisons is to be found in the Digest of Justinian ("Contract of Sale" xviii. I. 35), a work having statutory authority and being one of the constituent parts of the Corpus Juris. The text reads as follows:

Veneri mali quidam putant non contrahi emptionem, quia nec societas aut mandatum flagitiosæ rei ullas vires habet: quæ sententia potest sane vera videri de his quæ nullo modo adjectione alterius materiæ usui nobis esse possunt; de his vero quæ mixta aliis materiis adco nocendæ naturam deponunt ut ex his antidoti et alia quædam salubria medicamenta conficiantur, aliud dici potest.

This post-classical Latin may be thus rendered:

The opinion is held that a contract for the sale of a poison is void; on the analogy of the contracts of partnership and agency which have no powers to deal with improper matters; and this opinion must be upheld in those cases in which by no possible addition of other materials the poison can be rendered useful; but when by the admixture of other materials the harmful power is so lost that an antidote or even a useful medicament results, the contrary opinion must hold.

The Week's Poisonings.

THIRTEEN poisoning fatalities have taken place during the week, two being misadventures. Six of the deaths (one a misadventure) were caused by the unscheduled poisons hydrochloric acid (3), salt of lemon (2), and sulphonal. The suicides by spirit of salt were Emily Turney (51), of Chelsea, George Richard Wheeler (21), of Islington, and Agnes Reader, of Maidstone.—Olive Sunderland (26), of Smallbridge, Rochdale, poisoned herself with salt of lemon, a poison which was also taken by Caroline Newbury, of Reading, to destroy her life. The "unscheduled" misadventure occurred at West Hampstead, the victim being Mrs. Lavinia Phillips (65), who took 25 grains of powdered sulphonal and a five-grain tabloid sulphonal at one dose before going to bed and was found dead in the morning. At the inquest the medical evidence showed that death was accelerated by an overdose of sulphonal, and the Coroner said sulphonal should be added to the poisons-schedule and should only be obtainable under restricted conditions, as deaths from sulphonal were increasing. The scheduled poisons were carbolic acid (2), hydrocyanic acid (2), chloral hydrate, laudanum and strychnine.—At Ramsgate, Mr. Spencer W. Gore, brother of the Bishop of Birmingham, took an overdose of chloral hydrate by misadventure and was found dead in bed. At the inquest evidence was given by Mr. Edward Baily, pharmaceutical chemist, who said he supplied some chloral hydrate to the deceased gentleman, who appeared to know perfectly well the properties of the drug, and asked for it to be made up in concentrated form for the convenience of packing. He warned the deceased gentleman as to the dangerous nature of the drug, and supplied it in a ribbed and coloured bottle, with the words "Not to be taken" embossed on the glass side. A verdict of death from natural causes was returned.—The inquest on Dr. F. G. Alford, who was found dead at Hampstead golf-links, revealed the fact that the doctor had poisoned himself with prussic acid, 1 oz. of which he had obtained from Mr. Edward Beaton, chemist and druggist, England's Lane, N.W., on the pretence that it was to kill a dog.—Abraham Booth, a Stapleford photographer, poisoned himself with potassium cyanide. The carbolic suicides include a Cardiff woman who obtained a small bottle of carbolic acid from Frederick Evans, assistant to Mr. J. Hughes, chemist, Portmanmoor Road, Cardiff, stating that she required it for disinfecting purposes.

Photographic Notes.

By PHARMACEUTICAL CAMERIST.

EMANATIONS FROM DARK-SLIDES.

Adverting to a previous note on this subject (*C. & D.*, April 21, p. 611), it is interesting to observe that Dr. Nehauss, in the "Photographische Rundschau," points out that aluminium dark-slide shutters cause some action on the photographic plate, and that the action is not prevented by varnishing the dark-slide. If this proves on further investigation to be the case, it is a fatal drawback to the use of this metal for making light photographic apparatus, unless, of course, manufacturers can find some way out of the difficulty. Dr. Nehauss further states that ebonite is totally unsuited for use in dark-slides, as the substance is permeable by the violet and ultra-violet rays.

WINDOW TRANSPARENCIES.

A method of making window-transparencies, which is not altogether novel, but which at the same time deserves more attention than it has received, is brought forward by one of the German photographic papers. A fairly vigorous print is made (preferably on bromide-paper), squeezed on glass, and, when dry, backed with a mixture of equal parts of castor oil and turpentine. The author suggests bringing the print and glass into contact under a warm solution of gelatin, 1 in 20 or 30 of water, wiping off the superfluous moisture, squeezeegee, drying, and stumping with black-lead or powder-colours, and finally rendering the paper transparent as suggested above.

THE LATENT IMAGE.

Yet another theory of the composition of the latent image is forthcoming—this time from Herr Weisz, whose paper is abstracted in a recent issue of the "Journal of the Chemical Society." As a result of experiments on solarisation in silver-bromide films, the author suggests that the latent image consists of a "solid solution" of a subhaloid salt of silver, combined with silver in a silver haloid. This solid solution is very stable so far as the action of oxidising and reducing agents is concerned, and is considered to contain very little silver or subhaloid. Herr Weisz further suggests that the latent image is capable of development, because it is able to form a solid solution with silver; the haloid, he considers, is reduced by the developer to silver and subhaloid.

A PHOTOGRAPHIC BAROMETER.

A photographic print which will to a certain extent foretell rain should be an attraction to amateur photographers when making preparations for an outing, and when exhibited by a photographic dealer should also be a good advertisement. To prepare the "barometer" a bromide print is soaked in a formalin hardening bath containing about 10 per cent. of 40-per-cent. formalin, it is then thoroughly dried and the following mixture poured over it: Gelatin 45 grains, dissolved in water $1\frac{1}{2}$ oz., to which is added cobalt chloride 15 grains and glycerin 10 minims. The print should then be drained slightly and allowed to dry. When the weather is damp the print will absorb moisture and turn blue, and when dry it will lose moisture and turn pink.

"PAPIER VELOUS."

The following is recommended, in a German photographic journal, as a coating for paper in order to produce effects similar to those obtained by gum bichromate on the exquisite "Papier Velous" of M. Artigue:

Gelatin	...	...	...	2 grams
Lump sugar	...	...	...	5 grams
Honey	...	...	...	1 gram
Water	...	...	...	100 c.c.

To the mixture is added pure vegetable black 33.3 grams which has been well rubbed down with spirit. The paper to be coated should not be too porous, and the coating, which should be applied with a brush, should be even and thin. The sensitiser is a saturated solution of ammonium bichromate in 70-per-cent. alcohol. The developer is cold to lukewarm water, helped by a judicious application of sawdust.

Practical Notes and Formulæ.

KITT'S POMADE.

THIS old French remedy is prepared, according to "Le Monde Pharmaceutique," by mixing 1 part of chloroform with 2 parts of wax and 3 parts of lard. The wax and lard are melted together, removed from the fire, and after the mixture has cooled down to near the point of solidification the chloroform is added and mixed.

BAIT TO ATTRACT RABBITS.

It has been usual to add essential oils, such as anise, to bait used for catching rats and mice, but as to which flavour is best there are divided opinions. In the case of rabbits, correspondents of "The Chemist and Druggist of Australasia" state that oil of citronella is a great attraction. Only about 10 drops of the oil is needed for 25 lb. of bait.

DECOLORISING BLACK-EYES.

If the following solution is painted over the discoloured parts with a camel-hair pencil every two or three hours, it is said that the discoloration will be removed in twelve hours:

Acid. oxalic.	...	...	...	gr. xv.
Aquæ destill.	...	...	...	3j.

M. ft. applic.

The patient should be warned to be careful that none of the liquid gets into the eyes, as it will cause smarting.

CAT-POISONING.

A CORRESPONDENT of a morning paper who wished to kill painlessly an old cat, and could not obtain poison from his chemist, devised a method of poisoning the animal with ordinary house gas. This is how he did it:

Into one side of a box he fixed a piece of metal tube, taking a rubber connection from the gas-bracket. The cat was introduced into the box, and the box was then covered with a pall, and a weighted drawing-board to crown all. The experiment was entirely successful, and in thirty seconds there was no sound, the remains showing not the slightest trace of a death struggle.

EFFERVESCENT SOLUTION OF SODIUM PHOSPHATE.

AN excellent solution is, according to the "Rocky Mountain Druggist," prepared as follows:

Liq. sodii phosph. comp. (U.S.P.)	3ij.
Syrupi	...
Tr. aurantii recentis	...
Potass. bicarb.	...
Aquam ad	...

Mix all the ingredients except the potassium bicarbonate. Filter into a 12-oz. aerated water bottle; add the potassium bicarbonate, cork, and tie in the usual manner.

CLOUDINESS IN HOUSEHOLD AMMONIA.

A RECIPE is given in "Pharmaceutical Formulas" for a household ammonia in which a small quantity of yellow soap is used to give the cloudiness. Mr. W. A. Rodger ("Chemist and Druggist of Australasia") has been investigating the best conditions for producing cloudiness. He finds that only a very small proportion of soap is needed—10 grains to the pint. Borax in excess causes a general muddiness, and also the disappearance of the cloud. A resinous tincture improves the cloud, but colours the preparation yellow. Alcohol is an important factor in bringing up a cloud. If there is a nucleus of a cloud, the alcohol develops the cloudiness, but large excess thins the liquid, and spoils the effect by making the cloud transparent.

FULLER'S TOOTHACHE-JELLY.

THE "Druggists' Circular" prints the following as a successful remedy for toothache:

Phenol.	...	...	...	3iv.
Menthol.	...	...	...	gr. xxx.
Thymol.	...	...	...	gr. xxx.
Collodii	...	...	...	q.s.

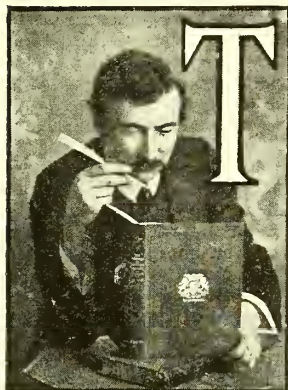
Half fill a 1-dr. vial with phenol in which the menthol and thymol have been dissolved; then add $\frac{1}{2}$ dr. of collodion and shake. A nice jelly results.

The directions are to put a small quantity of the jelly into the cavity of the tooth and cover with cotton-wool; repeat in five minutes if not relieved. Be careful not to get it on the lips.

The Chemists' Register.

Some of its Curiosities and Anomalies.

By W. MASKEW, Ph.C.



THE AUTHOR.

HERE are many chemists who have but little acquaintance with the official volume in which their names are alphabetically recorded. Its scarlet cover is adorned with those impressive words "By Authority," and no little amusement can be found by a perusal of its pages. By a careful digest of the 15,948 names who have a State duty to perform, we ascertain that chemists and druggists are ruled by no fewer than 28 *Kings*, among whom *Julius Cæsar* has special mention. There are no *Queens*, nor is there a *Kingdom*, but among the host of other dignitaries

there appears only one *Herald* to proclaim their coming. The list contains 3 *Princes*, 3 *Dukes*, 2 *Earls*, 6 *Barons*, 8 other *Lords*, 24 *Knights*, 8 *Squires*, 1 *Provost*, 3 *Mayors*, 4 *Judges*, 30 *Marshalls*, and 6 *Stewards*. These, when formed up into one *Royal* procession, would only have 2 *Bannermen* to carry the 3 *Banners*.

The musical section is inadequate, as there are no *Singers* or *Players*, and only one *Dancer*. We can form some idea of the orchestra, for it would include one *Hornblower*, one *Fife*, and 2 *Fiddlers*; but I regret these have only one *Chant* which they can play.

How they are all clothed is another matter. One only has a *Mantle*; 1 is in *Silk*, 2 are in *Cotton*. *Gay* colours are few, and we are told one *Hue* predominates. We find, however, 90 *Browns*, 40 *Greens*, 64 *Whites*, 2 *Grays*, 2 *Fawns*, 10 *Blacks*, and we also learn that two are *Blackmen*. There is not a *Boot* to wear.

The religious life of the chemist is well cared for, and although there is mention of only 2 *Parishes*, these must be large ones, containing, as they do, 7 *Churches* (with 3 *Peels* of 41 *Bells*) and one *Chappell*. The officiating clergy are numerous, for we have 9 *Bishops*, 14 *Deans*, 3 *Priests*, 4 *Deacons*, 2 *Vicars*, and 7 other *Parsons*. By this it is evident that the only church of *Rome* has not a great hold on those who have made pharmacy their calling, for we do not find a single *Pope*, although there are 4 *Abbotts*, 1 *Prior*, 6 *Monks*, and 4 *Nuns*. Where these are housed is a mystery, for there is neither *Abbey* nor *Monkhouse*.

Many chemists while following their proper calling are associated by name with other trades, for there are 5 *Carpenters*, 9 *Butchers*, 2 *Brewers*, 4 *Saddlers*, 25 *Masons*, 5 *Weavers*, 6 *Dyers*, 3 *Drapers*, 30 *Millers*, 2 *Thatchers*, 2 *Tanners*, and 4 *Farmers*; while we have one each as a *Woodman*, *Leadbeater*, and *Ironmonger*.

Whether trade is good or not we have no information, but 2 only have a *Fortune*, 2 only are *Rich*, and the 2 *Purses* contain 1 *Pound*, 3 *Pennies*, and 3 *Farthings*. In spite of this only 1 is in *Want*, and store trading is fairly general, one chemist only being *Dear*.

Beauty is never mentioned, though one chemist is *Lovely* and two are *Pretty*. The temperaments vary considerably, as we have 7 *Wild*, 7 *Savage*, 2 *Reckless*, and only one *Tame*.

Two are classified as *Fit*, 3 *Sturdy*, 10 *Hardy*, and I only as *Strong*. Six are *Keene* and 16 *Sharpe*; but we also have 3 *Moody*, 3 *Jolly*, 5 *Bright*; 2 are *Albright*, and 2 have always *Feltwell*. One chemist only is described as a *Badman*.

That longevity in the drug-trade is rare is shown by the fact that for 1 *Old* there are 39 *Young* on the register, and one is a *Younghusband*. Two are *Batchelors* and one is *Amiss*. Then there are 2 *Boys*, who amuse themselves with

3 *Toys*; and to ensure their good behaviour there are 2 *Ushers*, who are possessed of 2 *Birches* and one *Cane*.

That chemists have the ups and downs of life like the rest of humanity is evident, because 5 are in *Pain*, 2 in *Smiles*, 2 filled with *Joy*, 1 is *Jealous*, 1 is *Loveless*, 1 is *Love* itself, 4 are *Darlings*, and 3 are of the *Humble* kind. We have also 16 *Longs*, 5 *Shorts*, 2 *Biggs*, 7 *Littles*, 2 *Stout*, and 2 *Lean*.

Physiologically considered, we learn of 2 *Frekes*, who possess only 1 *Body* with 3 *Heads*, which share among them 1 *Hair*. This fact explains the necessity of the 2 *Wigs*. The 6 *Hands* also appear attached to the only *Back*, but as a means of locomotion we read of 3 *Leggs*. The intellectual side of the question is also diverting, as one chemist only is possessed of *Brain*. Three are described as *Sage*, 3 *Wise*, 2 *Wisemen*, and 1 *Schollar*.

That botanical names should be closely associated with those of pharmacists is evidenced by the 4 *Gardeners*, who appear to have an easy time of it, as there are no *Gardens* to look after, and only one *Seedhouse*, which at the present time has only one *Seed*. In another direction are 8 *Forrests*, where 2 *Oaks* (only one of which has a *Branch*), 4 *Birch*, 1 *Ash*, 1 *Elm*, and 2 other *Trees*, appear to thrive. In the 2 *Orchards* there are 3 *Peaches*, 4 *Lemons*, 7 *Berrys*, 2 *Cherrys*, 2 *Pears*, 1 *Vine*, 1 *Orange*, 2 *Crabtrees*, and 1 *Plumtree*, which I regret has only one *Plumb*. Close by there are 5 *Appleyards*, which to our dismay yield only *Sweetapple*.

We then come to 7 *Parks*, through which flow 5 *Becks*, and these can be crossed by 4 *Bridges*. Here grow 7 kinds of *Reeds* and 3 of *Spurge*, as well as 4 other *Plants*. After turning 2 *Corners*, we come to 11 *Fields* surrounded by 2 *Hedges* (both *Hawthorne*), and these are kept in order by 1 *Hedger*. In these we find growing 3 kinds of *Oats*, 3 of *Barley*, 2 of *Beans*. The adjacent 2 *Meadows* yield no fewer than 8 varieties of *Hay*, but the flora here is incomplete, consisting of 9 species of *Rose*, 1 *Privett*, 1 *Liley*, and 3 other *Flowers*.

The ornithologist would have a happier time in these pharmaceutical fields, but it is unfortunate that only 1 *Gunn* is available. There is 1 *Cockshott*, who finds good sport in the 1 *Martindale* where 30 *Martins* revel. There are also recorded 9 *Peacocks*, 2 *Ducks*, 2 *Drakes*, 2 *Crows*, 1 *Jay*, 1 *Pidgeon*, 5 *Partridges*, 2 *Sparrows*, 3 *Cocks*, 3 *Owls*, 3 *Rooks*, 4 *Swanns*, 1 *Wildgoose*, 6 *Woodcocks*, 2 *Herrons*, as well as 8 other *Birds*, which on further search I find are 3 *Robins*, 2 *Linnetts*, 1 *Wren*, 1 *Goldfinch*, and 1 *Dove*.

Not a few of the 25 pharmaceutical *Fishers* are sometimes disappointed with their lot, for in one place we read of only 1 *Fish*, and this has but 1 *Finn*. This statement is elsewhere contradicted, as we read of 3 *Pike*, 3 *Ling*, 3 *Had-docks*, 4 *Salmon*, 2 *Whiting*, 1 *Spratt*, 1 *Roach*, 2 *Cod*, 2 *Codling*, and 1 *Cockle*; and for those who cannot get sport enough from the above list there is the possibility of catching the one *Whale*.

A more vigorous sport is that of hunting, and we find 19 *Hunts* in the list; and of the 22 *Hunters* we notice that only three are on *Cobbs* and all 3 *Golitightly*. Further investigation reveals 19 *Foxes*, 4 *Boors*, 4 *Hares*, and 1 *Stag*. The country lends itself to this sport, for we find 11 *Dales* surrounded by 43 *Hills* and 2 *Mountains*. Near these are 3 *Dangerfields*, in which 3 *Caves* exist. A few wild beasts infest these parts, for there are 5 *Lions* and 1 *Wolf*; while 10 *Shephards* are required to protect the 4 *Lambs* and 1 *Ramm*.

We are not given a lucid meteorological report, but the available information indicates 3 *Stormes*, 6 *Gales*, 2 *Tempests*, and 6 *Breezes* all in progress. The directions of these are 20 from the *West*, 5 from the *North*, 2 *East*, while two originate in a *Southern* direction. Cold weather must predominate, for there are 1 *Spring* and 2 *Summers* to 6 *Winters*, during which there have been 11 *Frosts*. *Snow* occurs seven times, *Rain* four, and *Hale* only once.

When chemists hold a banquet 18 *Cooks* and 18 *Butlers* can officiate, but we are told that not more than 3 *Guests* are possible. There is not a great variety of dishes, and the limited menu would be as follows: 1 dish of *Bacon*, 2 of *Brawn*, 8 kinds of *Curries*, 1 *Lambshead* stewed with 1 *Onion*, 5 kinds of *Rice*, and 1 *Jelly*—which must be a large one, requiring 2 *Moulds*. Condiments would also play a part, as there are 3 *Salts* and 1 *Pepper*. Then

we come to the drink question, and find 2 prefer *Beer*, 6 *Porter*, 5 *Perry*, and 5 *Water*. Three will always *Drink-water* and 1 has *Emms*. These useful liquids are kept in 7 *Patts* and 1 *Cann*, and are handed round in 5 *Glasses* when necessary.

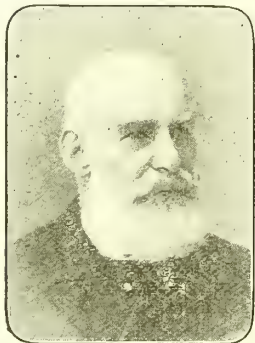
Chemists appear unevenly distributed geographically: 13 favour *Kent*, 1 *Suffolk*, 1 *Cheshire*, 1 *Westmoreland*, and when we come to towns there are 3 *Hulls*, 2 *Paris*, 1 *London*, 2 *Straud*, 2 *Whitby*, 1 *Darlington*, 1 *Thirsk*, 1 *Chester*, and many others. *Scotland* offers no attractions, and thus we find 43 *Scotts* and 2 *English* settling in the 5 departments of *England*, 2 of *Wales*, 3 of *Ireland*. The alien question does not cause alarm, as there are no *Germans* and only 7 *French* recorded.

It is to be hoped that now our Parliament has begun its Session all *Bills* will receive attention, especially the 1 on our list, as none of the 3 *Laws* which are mentioned meets our requirements. We are unable to bring about this result by force, as we possess only 1 *Warrior*, and 2 who are ready to *Makepeace*. If the worst should happen, we have one *Oliver Cromwell* to come to our rescue. I will now conclude my recital with the pleasing fact that no *Death* occurs among us. This happy state is no doubt due to the one *Bolus*, which must be one of the five *Boons* mentioned; and thus the 2 *Graves* which already exist may not be necessary.

Deaths.

BETTS.—The death took place at Woodbridge, Suffolk, on April 21, of the wife of Mr. John Betts, chemist and druggist, and the oldest tradesman in the town. Mr. Betts is eighty-five years old, and his wife was eighty-four. A short time ago they invited another octogenarian, Mrs. Groom to spend an evening with them, and their united ages totalled 249. During the absence of her maid, Mrs. Betts, in passing from one room to another, fell down two steps, breaking her hip-bone and dislocating her thigh, death ensuing. "Accidental death" was the verdict returned at the inquest on April 23, coupled with an expression of sympathy with Mr. Betts in his sad loss.

BUTT.—At his residence, 77 Hamilton Terrace, London, N.W., on April 18, Mr. Edward Northway Butt, pharmaceutical chemist, aged seventy-four. Mr. Butt was one of the best-known West-end pharmacists, and he had been associated with the practice of pharmacy in London for half a century. He occupied one of the best pharmacies in Mayfair, that of G. Jolley & Co., 13 Curzon Street, W., now owned by Mr. John W. Bowen, who was associated with Mr. Butt in the conduct of the business from 1882 until his retirement a few years ago. To pharmacists in Great Britain Mr. Butt was known through his connection with the Council of the Pharmaceutical Society. He first



entered the Council by co-optation on the retirement of the late Mr. John Shaw, Liverpool, in 1880. In August of that year, on the motion of his life-long friend, Mr. Alexander Bottle, Mr. Butt was appointed to the vacancy—a circumstance which caused some feeling, for Mr. Butt had not been a candidate at the previous election, and Mr. Hampson thought the vacancy should go to Mr. Spink, Westminster. This, perhaps, accounted for the fact that Mr. Butt was placed fourteenth at the poll in May 1881, but he improved his position three years later. He was, however, rejected at the election in May 1887. Mr. John Williams retired in the following month, and in July 1887 Mr. Butt was elected to the vacancy in spite of an effort being made to co-optate Mr. N. H. Martin, who had had a higher position on the poll than Mr. Butt. Again in 1889 Mr. Butt lost his seat at the poll, and did not seek re-election. Although these circumstances indi-

cate some lack of appreciation of Mr. Butt by the electors, there is no question of the fact that his colleagues had a high opinion of his abilities, especially in regard to financial matters. He had a wonderful acquaintance with the value of property in London, and with investments generally, and was of real assistance to the Society in its ground-rent investments. He was strongly opposed to the building scheme inaugurated about twenty years ago, his attitude being, perhaps, as much due to his strong opposition to the research laboratory and its director as to his belief that the scheme would embarrass the Society financially. Nothing but the sincerest conviction could have made Mr. Butt take up this attitude, as he was against a dear friend, Mr. Michael Carteighe. A few years after his retirement from the Council Mr. Butt (who by this time was acting as an auditor) attacked the Research Laboratory at an annual meeting of the Society; not because he was inimical to research, but for the reason that he thought the work done was not worth the money. Later he instituted a Butt Research Scholarship by means of an annual grant, which he withdrew when he found that the results did not realise his expectations. While Mrs. Butt was alive he was wont to attend with her the meetings of the British Pharmaceutical Conference; and their geniality will be remembered by many. The funeral took place at Thatcham Church, near Newbury, on Monday.

CLARKE.—At Richmond, on April 17, Mr. Thomas Meadows Clarke, pharmaceutical chemist, aged eighty-three. Mr. Clarke carried on business for many years at 50 George Street, Richmond, in the premises now occupied by Parke's Drug-stores, Ltd. He was a director of the Gas Co., and one of the oldest members of the Select Vestry.

LUCOCK.—At the residence of his son, at Acton Vale, London, W., on April 6, Mr. William John Lucock, chemist and druggist, aged sixty-three. Mr. Lucock was at one time in business at 230 Tottenham Court Road, W.

MORTIMER.—At Hele Hill, Bradford, Taunton, on April 14, Mr. John Mortimer, chemist and druggist, aged seventy-nine.

PARKINSON.—At Ellerbeck, Wellington Street, St. John's, Blackburn, on April 20, Mr. Christopher Parkinson, chemist and druggist, aged sixty-seven. Mr. Parkinson served his apprenticeship to pharmacy with his uncle, the late Mr. W. B. Slater, of Clayton Street, Blackburn. He eventually succeeded to the business, which he carried on for about forty years, being succeeded on his retirement a few years ago by his son, Mr. Charles Myers Parkinson, chemist and druggist.

RANDALL.—At the residence of her son, Mr. P. M. Randall, solicitor, Southampton, on April 25, the widow of the late Mr. W. B. Randall, pharmaceutical chemist.

SOAL.—At Coventry on April 18, Mr. Herbert Henry Soal, chemist and druggist, aged twenty-four.

TOWNSEND.—At Glenoak, Exeter, on April 13, Mr. James Townsend, principal of Messrs. James Townsend & Sons, label-printers, Exeter and London, aged sixty-four. The funeral took place at the Higher Cemetery, Exeter, on April 18, the service prior to the interment being conducted at St. Leonard's Church by the Rev. R. A. Callender and the Rev. W. Hope. The principal mourners were Mr. and Mrs. William Townsend (son and daughter-in-law), Mr. Herbert Townsend, the Rev. James H. Townsend, Mr. Reginald Townsend, and Mr. Wilfred Townsend (sons), Miss Townsend and Miss Mary Townsend (daughters), Miss M. C. Townsend (niece), Mr. Henry Gadd, the Rev. W. Hope, and Mr. H. H. Wippell (brothers-in-law), Mr. Jos. Wippell, Mr. H. Wippell Gadd, and Mr. A. Bromley Sanders (nephews), besides members of the firm's staffs, a large representation of Exeter business-men, and a special deputation of the police force was present.

POLSON.—At 54 Queen Street, Wolverhampton, on April 17, William Polson, M.B., C.M., eldest son of Mr. J. A. Polson, chemist and druggist, Bonarbridge.

RHODEN.—At Eily Terrace, Edinburgh, on April 20, Mr. Samuel Thornton Rhoden, chemist and druggist, late of Sheffield, aged forty-two. Mr. Rhoden was well known in pharmaceutical circles in Sheffield, having been on the staff of Mr. Job Preston for twenty-seven years. Last year he purchased the business of Mr. R. W. Dunn, 186 Dalry Road, Edinburgh. He leaves a widow and four children.

Notes on Trade Novelties.

MESSRS. ELLIS, SON & PARAMORE, Sheffield, are the manufacturers of the "Shield" brand of trusses.

THE "THISTLE" brand of sealing-wax is made by Messrs. J. McNeill & Son, Ltd., St. Enoch's Works, Glasgow.

MESSRS. WILLIAM TOOGOOD, LTD., Haddon Street, London, W., offer Parfumerie Monpelas and Malacéine toilet-preparations.

MALT EXTRACT and its preparations are manufactured by Messrs. Perry & Hope, Ltd., Nitschell, near Glasgow, who invite inquiries respecting them.

REDFORD'S GLOSS is a snow-white powder used for linen, which is placed on the market at popular prices by Messrs. Redford & Son, Liverpool, E.D.

MESSRS. ROGERS & Co., of 16 Carter Street, Walworth, S.E., are now making a specially cheap line of their patent silitated grease-proof boxes.

COD-LIVER AND CATTLE OILS.—It may be noted that Messrs. W. C. Kendall & Sons, Grimsby, are favourably placed for supplying these to the trade.

MESSRS. WESTON & WESTALL, LTD., of 41 Eastcheap, London, E.C., are showing "Droitwich Brine Crystals" at the Food and Hygienic Exhibition now being held at the Crystal Palace.

MESSRS. WRIGHT, LAYMAN & UMNEY, LTD., Southwark, London, S.E., advise druggists to contract now for spring and summer specialties, and as an earnest of this they quote in this issue a selection of saleable lines.

MESSRS. SHARLAND & Co., who command the New Zealand market, have a London house at Eldon Street, Finsbury, E.C., and they intimate that besides New Zealand they are exporters to other over-sea markets.

HYPNOGEN PALATINIDS are the newest product of Messrs. Oppenheimer, Son & Co., Ltd., 179 Queen Victoria Street, London, E.C. Hypnogen is recommended as one of the most useful and least objectionable of hypnotics.

TUSON'S DISINFECTANTS Co., March Gate Lane, Stratford, London, E., are the manufacturers of the antiseptics and agricultural preparations designed by the late Professor Tuson, who was well known as a veterinary expert.

MIDGFOIL is the name which Messrs. W. & R. Hatrick & Co., Renfield Street, Glasgow, give to a preparation for warding off the attacks of mosquitos and other disease-carrying insects. Messrs. F. Newbery & Sons, Ltd., and Messrs. Evans Sons Lescher & Webb, Ltd., are wholesale agents for it.

MESSRS. T. MORSON & SON, 14 Elm Street, London, E.C., print in their announcement facsimiles of the labels which they affix to their Kreosote, which is B.P., and their Beechwood Creosote, which in itself is a standard of what creosote should be. They also give facsimiles of the labels used for some of their special medicinal chemicals.

PRIMUS CATALOGUE.—MESSRS. W. BUTCHER & SONS, Camera House, Farringdon Avenue, London, E.C., have distributed their new catalogue of photographic goods among the chemists on their books. We are asked to state that as there are others of our subscribers who may desire to have a copy of the catalogue it will be supplied on application. It is a splendid production.

"A RECORD SEASON for both quality and quantity" is Messrs. Southwell Brothers & Barclay's concise report of the cod-liver oil industry. They have their own factories in Lofoten, and are thus able to give a personal guarantee of the purity of their oil. A postcard addressed to the firm at Birmingham will bring any reader a sample of their product.

"ESSENCES" (Messrs. J. Spencer, Son & Co., 96 Great Tower Street, London, E.C.) are exhibitors at the XXIII. Exposition Internationale, Concours, Culinaire, d'Alimentation, d'Hygiène et des Industries qui s'y Rattachent, Jardin des Tuileries, Paris, and we have received a copy of the neat pamphlet respecting their manufactures which they have distributed there.

LIQUID ICE.—The fever-tossed patient alone of afflicted mankind can appreciate what bliss there lies in a cool skin, and the term "liquid ice" is certain to attract the attention of Colonial chemists who read this issue. It tells of the "instant internal fever destroyer" manufactured by Messrs. W. Wade & Son, Plymouth, of which particulars are given in the announcement.

THE RELIABILITY OF SARSAPARILLA as a therapeutic agent has recently, as our readers are aware, been vindicated in the "British Medical Journal" by Sir Felix Semon and other eminent physicians. It is not surprising, therefore, that Messrs. C. I. Hood & Co., 34 Snow Hill, London, E.C., make this the occasion for reasserting the virtues of Hood's Sarsaparilla, one of the most widely used preparations of the drug.

MR. CARL ZEISS, 29 Margaret Street, Regent Street, London, W., and of Jena, has sent us further particulars of the Dipping Refractometer, which in combination with a heated spiral and water pressure regulator is used to ascertain the refractive index of beer at 17.5° C. This and the calculating-disc invented by Dr. Akermann give to chemists a rapid method of determining the alcohol and extract contained in beer.

RIISING TO THE OCCASION is one of the greatest merits in advertising. The outside of the cover of this Colonial Issue admirably shows how well Messrs. Allen & Hanburys, Ltd., have realised this requirement. There are not many businesses founded in the eighteenth century (no other so far as the drug-trade is concerned) that do this. The firm have a branch in South Africa, and they are alive to all colonial requirements.

THE CHEMISTRY OF ESSENTIAL OILS.—The half-yearly laboratory report of the London Essence Co. has just been issued, and a copy will be sent to any of our readers who send a postcard to the company's offices at George Street, Camberwell Green, S.E. The report, which is excellently produced, gives in concise form the results of the latest researches in the chemistry of essential oils. The present report is a distinct advance on previous issues.

AN EXCELLENT REPRODUCTION of the St. Louis Exhibition diploma is printed in this issue by Messrs. Stafford Allen & Co., Ltd., who got a gold medal for their essential and expressed oils and pharmaceutical preparations. Although the *C. & D.* gave an impression of this diploma last July, it must not be thought that Messrs. Allen's print is belated. It was the *C. & D.* that was very much in advance, for the diplomas were only issued to exhibitors last month.

BOTTLE-WASHING.—The new bottle-washing machinery of Messrs. Bousfield & Casson, of Hull, is well worth the attention of aerated-water manufacturers and bottlers. A special machine is made for the use of chemists, and up-to-date pharmacists will find several things to interest them in the illustrated catalogue, copies of which Messrs. Bousfield & Casson will be pleased to send to *C. & D.* readers. The address of the firm is 36A Waterloo Street, Hull.

SMART ADVERTISING.—Every successful business man nowadays must be an intelligent advertiser, and much inspiration in the very latest styles of types, stationery, labels, and posters will be obtained from the beautifully executed series of specimens sent out by Messrs. W. H. Smith & Son, 55 Fetter Lane, E.C. There are many illustrations, particularly among the labels, that will appeal directly to the pharmacist. The designs are varied and cosmopolitan in style, but each is marked with an individual distinction.

"OTANGO" is the name of a liquid which has been put on the market by Messrs. Francis, Son & Naylor, 38A Southwark Street, London, S.E., as a protective against the stinging of mosquitos, gnats, and midges. It both prevents insect-attacks and relieves the irritation and pain that follow insect-bites. "Otango" is put up in square bottles, and has a sponge attached to the cork, by means of which the liquid is applied to the skin. The season for gnat-bites is fast approaching, and chemists would do well to consider the claims of "Otango" as a trustworthy application for preventing and relieving insect-troubles.

"PHYSICIANS' AND SURGEONS' SUPPLIES" is the title given by Messrs. James L. Hatrick & Co., Ltd., 70 St. John Street, London, E.C., to the sixth edition of their illustrated price-list of antiseptic and surgical dressings, surgical instruments, indiarubber goods, clinical thermometers, operating-furniture, etc. The catalogue is exceedingly comprehensive, and extends to nearly 300 pages. It is printed on surface paper, is beautifully illustrated, and altogether is so arranged that it is bound to save chemists a lot of outlay, seeing that they can draw upon Messrs. Hatrick's stock by wire or otherwise.

SUMMER DRINKS.—Messrs. Stevenson & Howell's advertisement in this issue makes one forget that this week it has been snowing in London and elsewhere at home. But summer is approaching; at any rate the *C. & D.* is received every week in some place where summer conditions prevail. The S. & H. soluble essences for American ice-cream drinks will therefore appeal to many of our readers, and they will find other things in the advertisement which should induce direct correspondence with 95A Southwark Street, London, S.E.

THE ORIGINAL OF THIS pretty combination was sent to us the other day by Messrs. Parke, Davis & Co., 111 Queen Victoria Street, London, E.C., and we had it photographed. The combination makes a most effective showcard for this popular dental speciality—"Euthymol" tooth-paste—a delicacy now literally in the mouths of the million. Retailers can get copies of the card, which is printed in colours and stands about 1½ ft. high, from Messrs. Parke, Davis & Co. on application.

ANTURIC SALT has, we understand, been acquired by Mr. Tompsitt, of Messrs. Roche, Tompsitt & Co., the sole agents in Great Britain for Bile Beans. Anturic salt is now being advertised in a manner which catches the public eye, and with Mr. Tompsitt's mascot-like luck it will ere long figure more in chemists' returns.

MR. VINCENT WOOD, of Albion Place, Blackfriars, London, S.E., is putting up his suspensory bandages in this style. The sacs are seamless, and each one is mounted on a card as shown, and placed in a substantial box. The labels are printed in gold and colours, and the retailer may have his own name on the labels, and select any title he chooses. Among those in use are the "Macintosh," "County," "St. James," and "Grevillite." The suspensories are good value.

OATINE is the name of a new face-cream which deserves the attention of chemists. It appears to be a preparation which meets the desires of dermatologists who advise their patients not to use soap in washing. In certain affections of the skin alkali is prejudicial, as some soaps are to delicate complexions, hence the faculty's recommendation of oleaceous applications instead of soap and water. Oatine meets this requirement for toilet purposes generally, as it is to be used in the place of soap, and also for application after the toilet. It is manufactured by the Oatine Co., 30 Denman Street, London, S.E., and is put up in squat opal jars to retail at 1s. 3d. and 2s. 6d., the latter containing four times the quantity of the former. It is well advertised to the public.

Re RENDELL'S PESSARIES.—Mr. W. J. Rendell, 15 Chadwell Street, Clerkenwell, London, E.C., informs us that a large number of fraudulent imitations of his soluble pessaries are being sold in London and various parts of the country, and he has commenced actions against three firms for selling such spurious articles in which the wording on the boxes and the signature are a facsimile of those on the cover of the boxes issued by Mr. Rendell, although the goods are not of his manufacture. As any person who deals in these spurious articles, however innocently, is liable to an action, Mr. Rendell invites the trade to communicate with him if they are at all suspicious as to the genuineness of any pessaries in their possession which profess to be made by Mr. Rendell.

KORNEASCOPE.—This is the name of a new achromatic combination of lenses designed to give a flat field of the curved surface of the eye. The "Opsilus Korneascope," made by Messrs. Raphael, Wheway & Redfern, Ltd., 77 Clerkenwell Road, London, E.C., is a combination of two flint lenses and one crown lens worked from a new formula. On account of the powerful magnifying properties (ten diameters) and the perfectly flat field given by this Korneascope, it is specially adapted for opticians' use in examination of the sclerotic and cornea, and should be brought to the notice of the oculists with whom the chemist-optician has intercourse. The "Opsilus Korneascope" sells at 12s. 6d.



BLACKBURN SPECIALITIES.—The capital of North-East Lancashire is sufficiently known to chemists as the hub of a class of criticism and comment on pharmaceutical politics. More recently Messrs. Adley, Tolkien & Co., Ltd., manufacturing chemists, who have their headquarters in the town, have shown us that Blackburn is notable in other pharmaceutical respects. We have before us now several of their galenical specialities, which prove their competence as manufacturers. These are glycerin suppositories, torpedo shape, put up in squat amber-glass bottles ready for retailing; Poulticin, a combination that has only to be heated before application to an inflamed surface; and samples of elixir of cascara, elixir of glycerophosphates, and cascara cordial. We may also note as belonging to the last category a palatable and pourable cod-liver oil emulsion and malt and oil, two preparations for which the firm have acquired a reputation. Their latest production is a concentrated vinegar, which is really produced from malt. It is a dark-brown liquid which, on dilution with twelve times its volume of water, yields No. 16 vinegar of good flavour. Samples and quotations of these preparations may be obtained from the firm on application.

PHARMACEUTICAL COUNCIL ELECTION.

POSTCARD COMPETITION.

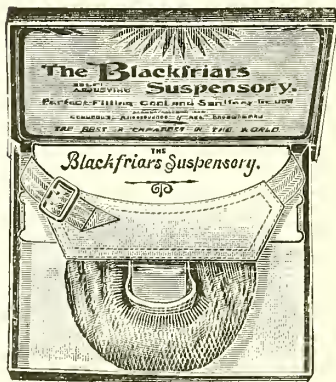
OUR subscribers and their employés are invited to forecast the result of the election of seven members to the Council of the Pharmaceutical Society of Great Britain. To do so they should write on postcards the names of all the candidates as they think they will stand when the result of the poll is declared on May 17. The names are as follows:

C. B. Allen	F. P. Sargeant
A. S. Campkin	F. R. Sargeant
W. G. Cross	D. Storrar
W. Giles	C. Symes
W. Hills	R. C. Walshaw

A. C. Wootton.

We shall award a prize of a guinea to the correct card, and divide the prize should more than one competitor be correct.

A SMOKING-CONCERT was held at the Norfolk Square Hotel, London Street, Paddington, W., on April 25, in connection with the Western Chemists' Association (of London). Mr. W. J. I. Philp (President of the Association) was in the chair, and an excellent musical programme, under the direction of Mr. Henry Prenton, was carried out. The artistes were Messrs. Henry Underwood, Harry Horscroft, James Avon, Bernal Osborne, and Professor Walter Lombarto, a concertina specialist.



Winter Session of Chemists' Local Associations.

Association Presidents.

THE President of the Hull and District Chemists' Association was not able to be present at the meeting reported to-day, so we fill the hiatus with his portrait.



MR. RICHARDSON.

Another Lincolnshire man is Mr. Arthur Richardson; that is a characteristic of Association Presidents which is as prevalent as Scots in the commerce of the Empire. It was in a small market town of Lincolnshire that Mr. Richardson made his first acquaintance with the side of pharmacy behind the dispensing-counter. That was in January 1872. In August 1875 he went to Croydon, where he was with Mr. Stannard for a year and seven months; then he had fourteen months at Hull in charge of a branch; came south again in August 1878, and passed the Minor in October 1879, having attended "Wills's" for the purpose. He was then nearly two years under the keen eye of Mr. Albert Cooper, Gloucester Road, South Kensington, learning much from him. Hull once more drew him north and he was with Mr. C. H. Kirton, pharmaceutical chemist, Savile Street, as an assistant until on February 2, 1885, he commenced business for himself at 443 Hessle Street, Hull. There are two chemists' associations in the town; it is the older one, which has no "trade" in its title, that Mr. Richardson presides over, and we note that its membership is numberless.

North Kent Chemists' Association.

A MEETING of the committee of the North Kent and District Chemists' Association was held at the Royal Horticultural Hall, Westminster, S.W., on Wednesday, April 25, for the purpose of electing the officers for the ensuing year. Mr. A. Stooke presided. The following gentlemen were elected: President, Mr. A. Fred Corfe (Maidstone); Vice-Presidents, Mr. A. J. Wing (Woolwich) and Mr. W. E. Goff (Dartford); Hon. Treasurer, Mr. A. Stooke (Gillingham); Hon. Secretary, Mr. R. Feaver Clarke (re-elected), 21 High Street, Gravesend.

Hull Chemists' Association.

A MEETING was held at White Horse Hotel, Hull, on April 19, Mr. Robson presiding in the absence of the President (Mr. Richardson).

CO-OPS. AND PROTECTED GOODS.—The Secretary (Mr. W. Staning) reported that he had, as instructed, written to proprietors of patent medicines who have protection schemes, and also to those who had withdrawn from the P.A.T.A. A large number of replies had been received, the line taken in most cases being that it was out of the power of the firms to interfere with what took place in co-operative stores after the articles had been sold at the fixed price. One firm had determined to rejoin the P.A.T.A. Some of the largest firms had not replied.—Mr. Walton suggested that where oppressive terms were asked chemists should combine to make a similar preparation of their own. The Chairman thought the best plan would be to cease to stock goods supplied at unfair prices. Mr. Selle said that to refuse a patent medicine to a customer might send him to the stores. Mr. Staning said his experience was that while customers would go to the stores for "patents," they would still come to the druggist for drugs.—Ultimately a motion expressing dissatisfaction with the replies was passed.

Thames Valley Chemists' Association.

THE annual meeting was held at the residence of Mr. Frederick Harvey, Surbiton, on April 18, Mr. Harvey presiding. The report and accounts were presented and

adopted. They showed the Association to be in a satisfactory condition, financially and numerically. A balance of about 7*l.* remained in hand. Hearty votes of thanks were given to the retiring President (Mr. Harvey) and to the Secretary (Mr. W. J. U. Woolcock) for their services during the year. The following committee for the ensuing year was appointed: Messrs. W. Bowden, F. T. Bowen, C. J. G. Bunker, H. E. Clement, H. S. Durbin, T. Evans, F. Harvey, A. Higgs, J.P., W. H. P. Kent, E. T. Neathercoat, C. J. Palmer, J. Parrott, W. H. Peake, J. W. Simpson, T. Turner, and W. J. U. Woolcock. The officers elected by the new committee were: President, Mr. W. J. U. Woolcock; Vice-Presidents, Messrs. F. Harvey and C. J. G. Bunker; Treasurer, Mr. J. Parrott; Auditor, Mr. W. H. P. Kent; Secretary, Mr. H. S. Durbin, 19 Victoria Road, Surbiton; Assistant Secretary, Mr. W. H. Peake.

Sheffield Pharmaceutical and Chemical Society.

THE last general meeting of the session was held at the Montgomery Hall on Wednesday last, Mr. H. Antcliffe (Senior Vice-President) in the chair. The meeting had been thrown open to all chemists, and there were a number of the members of the public present, together with Mr. H. G. Williams (Hon. Secretary), Messrs. F. W. Whitworth, A. H. Culverhouse, J. F. Eardley, J. Evans, P. Carr, F. Henderson, and F. Clark. The chief business of the evening was a lecture by Mr. F. B. Hirst, Ph.C., on

INVISIBLE RADIATIONS.

In introducing his subject Mr. Hirst outlined the history of the discovery of radio-active substances, and gave a *résumé* of the published results of the investigations up to the present time. He then went on to deal with the various phenomena of emanations from radio-active substances, exhibiting a specimen of radium bromide valued at 50*l.*, also samples of radium-barium chloride, etc., giving experiments illustrative of the properties of radium, various apparatus being shown, including the spinthariscopes and electroscope.—A number of interesting lantern-slides were shown, and also a number of exhibits of willemite, uraninite, thorinite, etc.

A hearty vote of thanks was accorded to Mr. Hirst, on the motion of Mr. Antcliffe, seconded by Mr. Eardley. In the course of a short discussion which followed, in reply to a question Mr. Hirst explained the grounds for his statement that the discovery of radium had destroyed the atomic theory, it being conjectured that the atoms were composed of corpuscles formed by the disintegration of the atom.

Northampton Chemists' Association.

THE fifth annual meeting was held on April 20, Mr. A. Arnitt presiding, in the absence through illness of Mr. W. D. Mayger, with whom an expression of sympathy was passed.

ANNUAL REPORT.—Mr. F. Cowdery, Hon. Secretary, submitted this report, which expressed satisfaction at the maintenance of the membership. Referring to recent legislation, the report observed that the Shop-hours Bill is not likely to be of much benefit, and pointed out some of its absurd anomalies. Chief interest centred just now in the Pharmacy Bills. If the Society's Bill became law it would be of real service to the chemist. As to the Government Bill, the fact that Mr. Jesse Boot favoured it was a significant indication that it would not be of much good to them, but rather would foster the formation of stores and company cash chemists. In accordance with the desire of the Association the members for Northampton town and county have been asked to support the Pharmacy Bill. The only reply received was from Mr. Herbert Paul, who said he would not lose sight of Mr. Winfrey's Bill.—The financial statement was submitted by Mr. Cowdery, and showed a balance in hand of 4*l.* 9*s.* 5*d.*—On the proposition of Mr.

L. North, seconded by Mr. H. O. Wilson, the report and balance-sheet were passed.

OFFICE-BEARERS.—Hearty thanks were passed to the retiring Chairman (Mr. Mayger) and Mr. F. Cowdery (Hon. Secretary). It was decided to ask Mr. W. McKinnell to take the chairmanship again, and great regret was expressed that through a grave accident to his youngest son he could not be present. Mr. F. Cowdery was re-elected Hon. Secretary, and with the customary thanks to the Chairman the business meeting ended.

AN INTERESTING PRESENTATION was then made to Mr. Donald McKinnell, divisional secretary of the Pharmaceutical Society. The gift consisted of a handsome silver-mounted salad-bowl bearing the following inscription: "Presented to Mr. Donald McKinnell by the Northampton Chemists' Association on the occasion of his marriage, March 12, 1906."—In making the presentation Mr. Armit said the pleasure was intensified by the fact that Mr. McKinnell is the son of such a firm and faithful friend of the Association, and one who is the life and soul of their meetings. Mr. McKinnell, on behalf of his wife and himself, tendered the Association his heartfelt thanks.

Edinburgh Chemists', Assistants', and Apprentices' Association.

At the meeting held at 36 York Place, Edinburgh, last week, Mr. John Lothian (Glasgow) communicated a paper on the

DETERMINATION OF CAMPHOR IN CAMPHOR LINIMENT.

This was supplementary to one by him reported in the *C. & D.*, April 22, 1905, p. 637. There is a wide diversity of opinion among observers as to time and temperature for complete evaporation of the camphor. The author reported as follows:

Instead of a shallow porcelain basin it is better to use a cylindrical glass dish 1 cm. in height and 8 cm. inside diameter. The cover of a culture-dish answers well. The superficies of such a dish is 50 sq. cm., and when 5 c.c. of oil is placed in it there is a layer of oil 1 mm. deep. It is better to use half that quantity—that is, a layer of half a millimetre in depth. The dish is supported on a copper ring of the same inside diameter placed on the water-bath and levelled, so as to obtain a uniform layer, by propping up the legs of the tripod.

The bath should be nearly filled with water, which is kept boiling briskly, no further attention being required until an hour has elapsed, when the dish is taken off, quickly cooled, weighed, and the loss determined.

The results obtained by using a deep cylindrical dish of the same diameter dipping in the water were not so good.

In order to ascertain the rate of volatilisation, about 4 grams (*i.e.*, a layer of about 0.8 mm. deep) of a camphorated oil containing 21.79 per cent. of camphor were heated as above described for five minutes at a time, cooled, weighed, and the loss noted. Substantially 40 per cent. of camphor is driven off in five minutes, 78 per cent. in fifteen minutes, 95 per cent. in thirty minutes, 99.75 per cent. in sixty minutes, and 99.9 per cent. in sixty-nine minutes.

The behaviour of the olive oil must be taken into account and in practice it is not advantageous to continue the heating beyond one hour, as after the camphor is expelled the oil begins to take on a bleached appearance and to gain weight.

Mr. Lothian gave a practical demonstration of the polarimetric method of determining the camphor, showing how the rotation gives directly the percentage of camphor as fully explained by Mr. Liverseege in a paper communicated to the *C. & D.* Messrs. Boa, Cowie, Forret, Glass, Hill, McCutcheon and Plenderleith discussed the paper; Mr. Cowie defending the method given by Mr. Dickson and himself.

Glasgow and West of Scotland Chemists' Association.

At Glasgow on Tuesday, April 24, a well-attended joint meeting of the members of the Glasgow and West of Scotland Pharmaceutical Association and the Glasgow and West of Scotland Chemists' Trade Association was held for the purpose of dissolving these associations and of forming a new association of chemists as referred to in last week's *CHEMIST AND DRUGGIST*. Mr. J. W. Sutherland, as President of the Chemists' Trade Association, first took the

chair, and on the motion of Mr. Murchie the necessary resolution dissolving the Association was unanimously passed. Mr. Sutherland then handed over the funds, and Mr. J. P. Gilmour, President of the Pharmaceutical Association, took the chair, and the first thing he had to do was to intimate the presentation of forty-four volumes of *THE CHEMIST AND DRUGGIST* from Dr. A. M. Robertson, who is retiring from business. Dr. Robertson was cordially thanked. The appropriate resolutions winding up the Association (as printed in the *C. & D.* last week) were then moved by Mr. Moir, and seconded by Mr. Currie, the latter suggesting that the new Association should do something to combat the prescribing of proprietaries by producing a book of formulæ such as the Bournemouth one. The resolutions were carried.

Mr. Currie now took the chair, and the meeting with the same unanimity resolved to form a new Association, to be called "The Glasgow and West of Scotland Chemists' Association." The draft constitution was approved, and the by-laws were discussed. Two of the by-laws, which, with the others, were approved, give power to regulate the prices of proprietary and other articles so as to yield an adequate return to the members, and to negotiate with manufacturers to fix a minimum retail price for their goods which should yield not less than 20 per cent. profit to the retail trade.

Mr. Adam moved that Mr. Gilmour be elected President of the new Association. Mr. McCowan seconded, and the appointment was made unanimously. Mr. Gilmour thanked the members.

The other office-bearers were then elected as follows: Vice-Presidents, Mr. W. L. Currie and Mr. J. W. Sutherland; General Secretary, Mr. James Lennox; Treasurer, Mr. Tocher; Librarian, Mr. Jevine; Council, Messrs. J. Riddell, T. S. Barrie, J. H. Hart, R. T. McCowan (Paisley), J. Moir, J. A. Russell (Greenock), Mackie, Murchie, James Cockburn, Guthrie (Clydebank), A. McMillan, G. F. Merson (Kilmarlock), G. S. Kitchin, Crombie, and Smith.

Chemists' Assistants' Association.

The last ordinary meeting of the session, held at 73 New-man Street, London, W., on April 19, was one of the most successful of the session. Eighteen members and friends were present. Mr. A. G. C. Paterson (President) being in the chair. Mr. W. H. Goy was announced to give a paper on

LANTERN-SLIDE MAKING.

but he preferred to call it "An Evening with the West Surrey Photographic Society," of which he is an active member. Mr. Goy's preference was justified by the fine collection of photographs exhibited, which formed the feature of the evening. He commenced his paper by dwelling on the value of photography as a side-line. The more the photographic chemist knows of photography, the greater, of course, will be his photographic profits, and by pushing his developing and printing department, doing the work himself, and not letting it out, he can make a name which no cash or drug store can rob him of. The advantage of doing the work personally is obvious, for in photography, as in everything else, reliability pays, and the chemist who does his own work and treats the novice and the expert with the same care and interest, gains permanent customers, and comes to be looked to as a referee in difficulties. Mr. Goy then went on to slide-making. The best negative to make a slide of is one full of gradation and detail, and it is not necessary that it should be technically perfect. Very hard or very thin negatives are not satisfactory, and very dense negatives may require daylight or magnesium light. The two methods of producing slides are by contact and by reduction in the camera. Mr. Goy prefers the first method. It is quicker than the second, does not need daylight, nor special apparatus, and any part of a negative can be selected for reproduction. Thin negatives, however, reproduce best by the reduction method. Before placing in the printing frame the negative must be freed from all defects, such as pinholes, and from every speck of dust. Dust is best got rid of by sharply tapping the edge of the upright negative on something hard. Brushing is not sufficient. It is best to make a trial exposure by exposing a plate in

strips, five seconds at a time. On developing the plate will show a series of strips each exposed five seconds longer than the preceding one. Thus it is possible to judge to a nicety the exposure best suited to a particular negative. Mr. Goy uses exclusively a pyro-ammonia developer made according to the following formula:

Ammonium bromide (10-per-cent. solution)	40 minims
Ammonium carbonate (10-per-cent. solution of clear crystals)	40 minims
Water	11 drachms
Pyrogallol (dry crystals)	2 grains

Mix in above order and add—

Ammonia (10-per-cent. solution of .880 strength)	20 drops
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It is important that the bromide should be a fresh solution. The plate should be taken straight from the developer to the fixer without washing. Mr. Goy uses the following fixing bath:

Hyposulphite of soda	$\frac{1}{4}$ lb.
Metasulphite of potash	$\frac{1}{2}$ oz.
Water	1 pint

This fixer must be freshly made. It will not keep. In binding up a slide it should be warmed before the cover glass is put on to get rid of moisture in the emulsion. Mr. Goy then proceeded to exhibit lantern-slides of about a hundred photographs taken by himself and other members of his society. All of them were excellent specimens of artistic photography and slide-making. Many of them have secured medals or other awards several times. Specially notable were slides of "living statuary" in terra cotta tones, obtained by blocking out the backgrounds of photographs of London street figures, the result being wonderfully effective; architectural interiors chosen with fine feeling; flower slides on orthochromatic plates by Mr. Goy and his wife; rural scenes, and some beautiful river and sea scenes, with delicate mounts photographed on the cover glasses.

Peterborough Chemists' Association.

A MEETING was held at Wisbech Town Hall on Thursday, April 19, the President (Mr. C. Bayley) in the chair. The muster from Peterborough and the neighbourhood was satisfactory, but it was felt that the meeting ought to have been more largely attended by chemists from the Wisbech side of the district.

CO-OPERATION AMONG CHEMISTS.

The President, in an excellent address, adduced, in support of the advantages of professional combination, two instances of benefits which had lately accrued to members of the Peterborough Association. He himself was much interested in the case of the orphan child of a chemist's assistant who was a candidate for the Wolverhampton Orphanage. At the recent general meeting of the Peterborough Association he mentioned the case, and was fortunate enough to enlist the active interest of the President of the Pharmaceutical Society, who happened to be present. Other members of the Society were also good enough to show a practical concern in the child's welfare, with the excellent result that it was elected at the head of the poll, securing 1,830 votes. The second instance illustrated not only the advantages of combination, but the advisability of dual membership in the local Association and the Chemists' Defence Association, and was the recent prosecution of three Peterborough chemists under the Sale of Food and Drugs Acts. A meeting of the local Association was immediately convened to discuss the cases and decide on what action should be taken to defend them, with the result that we have already reported. Those two instances, said the President, should bring home to all of them the great advantages of united action in common interests. There could be no doubt that if members would only show a more lively interest in the meetings of the local Association, and would bring forward matters of trade concern for discussion, very great benefit would accrue to the craft generally.

Mr. Bayley was heartily thanked for his address, and several members expressed their satisfaction at the outcome of the Association's work in the two directions indicated.

OTHER BUSINESS.

How best to support the benevolent fund of the Pharmaceutical Society was fully discussed; and the Association decided to visit Cambridge for the summer outing. Upon consideration of the Bills before Parliament relating to pharmacy, the opinion was expressed that to allow poisons to be sold by persons other than qualified chemists is inimical to the true interests of the public as well as contrary to the spirit of the Pharmacy Act, 1868, and therefore should be prevented if possible. A letter was ordered to be sent to Mr. R. Winfrey, M.P. for South-West Norfolk, thanking him for the interest he has taken in pharmacy since the opening of Parliament, and wishing him every success in his future efforts in the same sphere. Tea was partaken of at the Ship Hotel.

London Chemists' Association.

MEETINGS of the General Purposes Committee and of members of the Association and other chemists were held in the Council Room of the Royal Horticultural Society, Vincent Square, Westminster, on April 25. At the committee-meeting about six members were present, but this number was added to by members and others attending the general meeting, and by the time this meeting opened about fifty were present, a considerable proportion of whom were chemists from the provinces. Mr. F. W. Truman occupied the chair at both meetings.

CORRESPONDENCE.—Mr. Gadd wrote to say that it would not be possible to hold a meeting of the Federation in London this year.—Letters were read from Mr. Goldby and other chemists in Enfield and the neighbourhood saying that it was desired to establish some form of chemists' association for the district, and they would like to join the London Association provided one meeting a year is held in their district. It was decided to suggest that the L.C.A. should hold a meeting in Enfield in June or July. Mr. Goldby came in at a later stage of the committee, and the Chairman informed him of the decision. He explained that as the area from which members would be drawn included such scattered places as Barnet, Enfield, Bowes Park, and Wood Green, the more natural thing was to join the L.C.A.—The Eastbourne Association wrote further in regard to B. W. & Co.'s prices, suggesting an interview between Mr. Wellcome and some members of the more influential associations, such as the L.C.A. The matter was adjourned to the general meeting, and was further adjourned from that meeting on account of the lateness of the hour.

BREAKING BULK.—The South London Branch transmitted the resolution which they passed as a result of Mr. J. W. Douglas's paper on this subject. Mr. Truman said that the Board of Inland Revenue had been written to in regard to the loss of revenue arising from the practice, but had declined to reply definitely, because they said they were expecting a deputation from the London Chemists' Association about the matter. The Chairman said that they knew nothing of the matter, and he questioned if it was wise to stir up the Board. This and other matters were deferred.

SEIGEL'S SYRUP AND THE P.A.T.A.—Mr. Betty read a circular issued by A. J. White, Ltd., announcing their withdrawal and the restoration of their prices to the former scale. They declared that they had derived no benefit from price-maintenance, and they were convinced that the co-operatives cannot be coerced. Mr. Betty returned his stock of the syrup on receiving this communication, and refuses to sell it. Mr. Pentney said that Mr. Betty's action should be copied. He had done the same with Bile Beams. He attributed the state of A. J. White, Ltd., to chemists not handling Segel's syrup under the old conditions, and said the company should be made to feel that the P.A.T.A. is a power in the country. The Teesside Association's resolution was referred to the Parliamentary Committee.

ANNUAL MEETING.—May 30 was suggested, but it was left in the hands of the Chairman and Secretary. This finished the committee business. At the general meeting immediately following nothing was discussed but the

POISONS AND PHARMACY BILL.

Mr. T. H. W. Idris, M.P., was to have delivered an address on the subject, but Mr. Pentney read a telegram

saying that Mr. Idris is still confined to the infirmary at St. Asaph as the result of his unfortunate accident, his injuries being much more serious than was supposed, and a resolution conveying to Mrs. Idris the deep regret of the Association was passed. Mr. Pentney then opened the discussion. He had been often in the House of Commons; sometimes twice a day, and he found that Mr. Idris was anxious to know the general feeling of chemists in connection with the negotiations with Lord Crewe. Hence his proposed address. It was necessary to recollect, said Mr. Pentney, that the Bill is a Government measure, and while he was anxious to do nothing to retard the efforts of the President of the Pharmaceutical Society he could not endorse the remarks of the official journal, which seemed to say "Open your mouths and see what the gods will send you." They would never get their mouths filled that way. There is no necessity for great caution. He submitted the following motions:

1. That, whereas by the 1868 Act it was enacted that the sale of poisons should, for the public safety, be entrusted to those qualified by examination, it is an injustice and is a danger to the public that licences for the sale of certain poisons should be granted to unexamined persons, and this Association protests against such licences being granted within two miles of a registered chemist.

2. That, whereas it is, and must be recognised that it is, a great injustice to thousands of chemists throughout the country, and contrary to the spirit of the 1868 Act, that any person or persons should use the title of "chemist" without having been examined as prescribed by law, these persons or companies should be compelled by an amendment of the Act to discontinue such use forthwith; and, that the expense of such discontinuance is greatly exaggerated by such companies, and that the time during which the titles are used should not extend beyond one year.

Mr. Pentney said that the Government is determined to carry some Bill and they have undoubtedly been influenced by those who have suffered at the hands of the Pharmaceutical Society. However, Lord Crewe must find that the efforts to minimise the evil are backed by the whole of the chemists of the country. The use of the titles for seven years he likened to granting a thief further use of a watch he has stolen. Mr. Jesse Boot had told him that they "were not going to stand this seven years." In the course of the discussion Mr. Pentney said that he had heard that the period was to be reduced to three years. When the Bill gets to the House of Commons he (Mr. Pentney) hoped to lay stronger resolutions before them, for the negotiation stage would then have passed. The first resolution was then moved, and Mr. Douglas was questioning whether there are not restrictions which make the unqualified sale of agricultural and horticultural poisons difficult and whether it matters much who sells these particular poisons so long as they are sold in bulk, when Mr. Burton rose to a point of order because the resolution had not been seconded. The necessary seconder being forthcoming, he proceeded to declare that there is no necessity for the articles to be sold by other than registered chemists. There are very few districts far distant from a chemist, and farmers can always lay in stock on market-days.—Mr. Douglas continued his dissent. Chemists would still sell these articles, he said, and not only in bulk, but broken.—Mr. Betty thought that if such a wrong principle was acquiesced in unqualified retailing would not stop with agricultural and horticultural poisons. (Hear, hear.) Mr. Pentney said that if the necessity for safeguarding the public existed in 1868 the public still have a right to be so safeguarded.—Mr. Bailey (President of the Peterborough Association) said that experience in a wide agricultural area showed that they ought not to lose the right of selling such poisons. He thought the two-mile limit would render it not worth while to take out a licence.—Another gentleman said there was nothing to prevent manufacturers putting up penny packets of these poisons. It was suggested that the quantity should be limited as is the case with the sale of arsenic.—Mr. H. W. Gadd said that no hardship accrues in the West of England to agriculturists and horticulturists, because they are all served by chemists in market towns at competitive prices.

The first resolution was unanimously carried.

The second having been seconded by Mr. White, Mr. Pentney said that Mr. Boot constantly holds levees of M.P.s at the House and he (Mr. Pentney) wished that more chemists

would back up the efforts in the Lobby against the companies. Chemists have taken it too much lying down. They should be up and doing.—After some discussion the motion was also adopted. It was agreed to send the resolutions to all Chemists' Associations. The meeting then adjourned.

The annual meeting is to be held on May 10, and not on May 3 as announced.

Recent Wills.

BAGOTT.—Probate of the will of Alderman George Bagott, J.P., chemist, Dudley, Worcester, who died on January 21 last, aged eighty, has been granted to his sons, Mr. Edward Bagott and Mr. John F. Bagott, for whom provision has been made by their uncle. He bequeathed his estate to his wife and other members of his family. The estate has been valued at 14,789*l.* 1*s.* 10*d.* gross, of which 5,076*l.* 11*s.* 1*d.* is net personality, the bulk of the property being real estate.

BARDSLEY.—By his will, dated June 30, 1905, Mr. Robert Bardsley, of the firm of Messrs. Jewsbury & Brown, Manchester, left his household and personal effects to his wife and an annuity of 200*l.*, and he bequeathed 2,500*l.* to his son, George Bardsley. Subject to other provisions, Mr. Bardsley left the residue of his estate to his children, excepting his son John and his son George, who are otherwise amply provided for. The estate has been valued at 19,862*l.* 15*s.* 4*d.* gross and at 18,296*l.* 2*s.* 11*d.* net.

BROCKLEHURST.—The late Mr. Wright Brocklehurst, chemist and druggist, of Market Street, Hayfield, left estate valued at 2,625*l.* gross.

BUCK.—Probate of the will of Mr. Jonathan Marsden Buck, pharmaceutical chemist, Cloughton, Cheshire, who died on January 5 last, aged eighty-three, leaving estate valued at 4,174*l.* 17*s.* 3*d.* gross and at 3,586*l.* 16*s.* 3*d.* net, has been granted to his daughters, the Misses Marian and Lucy Buck, both of Cloughton.

COCKRILL.—Mr. James Cockrill, pharmaceutical chemist, 113 Finsbury Park Road, London, who died on March 6, aged ninety-three, left estate valued at 2,083*l.* 2*s.* 6*d.* gross and 2,053*l.* 10*s.* 11*d.* net.

DAVIS.—Probate of the will of Mr. John Davis, Nottingham, dispenser and chemist, formerly of Leicester, who died on March 27 last, has been granted to his widow. The testator's estate has been valued at 395*l.* gross.

GODOLPHIN.—The estate of the late Mr. George Frederick Alfred Godolphin, chemist and druggist, Notting Hill, who died on December 15 last, has been valued at 1,673*l.* 5*s.* 5*d.* gross and 1,489*l.* 14*s.* 1*d.* net.

HACKFORTH.—Mr. Matthew Hackforth, chemist and druggist, Croston, Lanes, who died on February 20 last, aged seventy-eight, left estate valued at 641*l.* 8*s.* 1*d.* gross.

MADGSHON.—Miss Flora Curle Madgshon, chemist and druggist, 1 Croft Terrace, Jarrow, Durham, who died at Steynsburg, Cape Colony, intestate, on January 7 last, left estate of the gross value of 1,988*l.* 15*s.* 7*d.*, of which the net personality has been sworn at 1,907*l.* 18*s.* 1*d.* Letters of administration of her estate and effects have been granted to her father, Mr. Robert Madgshon, chemist, 1 Croft Terrace, Jarrow.

MATTHEWS.—Mr. Thomas James Matthews, Greenwich, for thirty-six years dispenser to the late Mr. Shute, Croom's Hill, and for the last fourteen years dispenser to Dr. C. H. Hartt, who died on March 14, aged sixty-five years, left estate valued at 235*l.* 15*s.* 8*d.*

PICKARD.—The late Mr. Henry Pickard, of Stratton, Cornwall, chemist and druggist, who died on February 6 last, aged fifty-five, left estate valued at 1,827*l.* 4*s.* 10*d.* gross, and probate of his will has been granted to Mr. J. H. Stacey.

SMITH.—Probate of the will of Mr. Samuel Smith, chemist and druggist, Haywards Heath, and formerly of New Swindon, who died on March 12, aged sixty-three years, has been granted to the executrix, his widow, Mrs. Emma Smith. His estate has been valued at 1,593*l.* gross and 1,537*l.* net.

WEARING.—Estate of the gross value of 3,722*l.*, with net personality amounting to 2,834*l.* 17*s.* 1*d.*, was left by the late Mr. William Henry Wearing, chemist and druggist, St. David's, Exeter.

WRIGHT.—Probate of the will of Mr. William Wright, chemist, 7 Stormont Road, Lavender Hill, London, S.W., and formerly of Newton Abbot, Devon, who died on February 22 last, aged eighty-two, has been granted to his daughter, Miss Eleanor Constance Wright, of 7 Stormont Road, the residuary legatee. The estate has been valued at 1,235*l.* 15*s.* gross and at 1,218*l.* 15*s.* net.

Legal Reports.

High Court Cases.

DODD'S DRUG-STORES.

IN the case of Jefferson Dodd, Ltd., *v.* Dodd's Drug-stores a motion to restrain the defendants, until the trial of the action or further order, from doing certain things calculated to injure the plaintiffs, came before Mr. Justice Swinfen Eady, in the Chancery Division, on Tuesday, April 24. Mr. Eve, K.C., and Mr. O. Leigh Clare (instructed by Messrs. Williams & Broxham) appeared for the plaintiffs; and Mr. Micklem, K.C., and Mr. Tanner (instructed by Messrs. Elliston & Davie) represented the defendants.

Mr. Eve, K.C., in support of the motion, said the plaintiffs desired to restrain the using on any of the defendants' shops, premises, labels, or advertisements, of the word "Jefferson" in such a way as was calculated to lead to the belief that the defendants are carrying on the business of the plaintiff company. Injunctions were also asked to restrain the defendant company, their managers and servants, from selling or offering for sale any medicine or compound as made or compounded by the plaintiffs, and to restrain the defendant company from selling as "Dodd's Female Pills" any medicine not manufactured by the plaintiffs without clearly distinguishing them from the plaintiffs', and to restrain an alleged infringement of the plaintiffs' trade-mark granted in 1888.

Mr. Micklem, K.C., for the defendants, said they were carrying on a business which was formerly carried on by Jefferson Dodd. They had purchased that business, together with certain recipes. He was, however, prepared to undertake not to sell any Dodd's female pills till the trial that would also apply to the trade-mark, as the trade-mark referred to the pills. They had no desire to represent their business as the business of the plaintiffs. They had taken over the business of Jefferson Dodd, and that name was over several of the shops.

Mr. Eve said that in some cases the name was cut in the marble facing, and in one case it was let into the mosaic work. He did not desire the defendants to destroy the marble or mosaic, but where the name was simply over the shop in gilt letters he thought it ought to be removed.

Mr. Micklem did not object. He thought the request of his learned friend in this matter was not unreasonable. They could either remove the letters or add the words "successors of."

After further discussion it was arranged that the defendants should, until the trial, without prejudice, give an undertaking in the terms of the notice of motion. The undertaking was not to require the defendants to remove the words "Jefferson Dodd" where they appeared at the defendants' shops let in the marble or mosaic. It was further understood that the defendants were not to be prohibited from styling themselves the successors of Jefferson Dodd.

Pharmacy Act, 1868.

INTENSIFYING-SOLUTION.

AT the Edgware Police Court on Wednesday, April 25, Mr. John Smith, watchmaker, Harrow, was charged at the instance of the Secretary and Registrar of the Pharmaceutical Society with an infringement of Section 17 by selling solution of corrosive sublimate, being photographic intensifying solution, without labelling it "Poison," and otherwise intruding the provisions of the section. Mr. W. S. Glyn-Jones, barrister, conducted the case on behalf of the prosecutor, and it was explained that the intensifier was sold to Harrow schoolboys, and that a bottle contained enough of the poison to kill eight of them. Defendant explained that he sold the intensifier exactly as he had bought it from Messrs. Houghtons, Ltd., photographic dealers, High Holborn, London, W.C. He was fined 5s., and 3s. 6d. costs.

Sale of Food and Drugs Acts.

TINCTURE OF OPIUM.

AT Aberdeen last week, Sheriff Henderson Begg fined a chemist (whose name did not transpire) 5l. for selling tincture of opium 16 per cent. deficient in morphine.

CREAM OF TARTAR.

BEFORE Sir Horatio Davies at the Mansion House Police Court, on April 25, Mr. George Chas. Meacher, chemist, of 1A Wood street, Cheapside, was summoned for having sold, on March 21, purified cream of tartar containing 0.0175 per cent. of lead in combination, equal to 1.22 grain of lead to the pound.—Defendant pleaded guilty.—Mr. Vickery, who appeared in support of the summons, explained that cream of tartar ought not to contain any lead whatever, as its presence, in whatever quantity, was liable to be injurious to health. It was used in the preparation of drinks.—The Alderman: For what purposes is the lead added?—Dr. Collingridge, medical officer of health: It is not a deliberate adding; it is due to contamination by carelessness in manufacture.—The defendant said that the sample in question was purchased from a high-class City firm, and was labelled "B.P." After some remarks as to the desirability of getting a warranty, and a statement by Mr. Vickery that defendant had been previously convicted in respect to mercury ointment and lime-water, the Alderman said he could not look over these repeated mistakes, and fined the defendant 5l., with 17s. 6d. costs.

Bankruptcies and Failures.

Re CARL HOHMANN'S Public Examination.—Messrs. Field & Cunningham, solicitors to Dr. Weiss, write, on behalf of their client, to deny that he owes the bankrupt 200l. or any other sum, as was stated at the public examination reported in our issue of April 7.

Re WILLIAM EDWARD JAMESON, 1 Harold Place, Hastings, Sussex, Pharmaceutical Chemist.—According to the statement of affairs filed herein the gross liabilities amount to 1,136l. 8s., of which 618l. 18s. is unsecured, and the assets are expected to produce 52l. 5s., less 47l. 10s. for preferential claims, leaving net assets 4l. 15s. and disclosing a deficiency of 614l. 3s. The receiving order was made on the petition of creditors on April 9, the act of bankruptcy being that the debtor, before February 26 last, failed to comply with the requirements of a bankruptcy notice served on February 17. It would appear from the Official Receiver's report that the debtor states that he has been in business in Hastings for twenty-five years, and he took over the present business from his father; a younger brother came in with him and remained until he died about five or six years afterwards. Debtor then had the business entirely to himself, and at that time he had three shops, two at Hastings and one at St. Leonards, but for the last ten or twelve years he has had only one shop. About seven years ago he paid 5s. in the pound to ten trade creditors, but the other creditors were paid in full, except the present petitioning creditor, who was to let matters stand over for seven years at interest. He states that if the business is sold as a going concern for what it is worth he is not insolvent now. Practically no assets are returned as available for the unsecured creditors. The bill of sale is dated August 8, 1905. The consideration is 453l. 10s. 5d., being 423l. owing and 30l. present advance. The debtor states that his present position has been brought about by depreciation of trade and long and continued illness. He has not furnished a deficiency account. The following are among the creditors: Mrs. Jameson, Hastings (154l. 13s. 5d.); Barron, Harveys & Co., London (19l. 6s.); Evans Sons Lescher & Webb, Ltd., London (11l. 14s. 2d.); Burge, Warren & Ridgley, Ltd., London (10l. 9s. 1d.); W. Sutton & Co., London (21l.).

Gazette.

Partnerships Dissolved.

Bull, E. G., and Tipping, H. H., Sparkhill, Worcester, surgeons and apothecaries.

Finney, T. B., and Stackhouse, H., under the style of Finney & Stackhouse, spice and herb grinders, colour merchants, etc.

Walton, A., and Walker, P. W., under the style of Walton & Co., Didsbury, Manchester, chemical contractors.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

Miller, Richard, Sedbergh, Yorkshire, chemist and druggist.

Deed of Arrangement.

Jarvis, Samuel Horace, 63 Devana Road, Leicester, chemist and druggist. Trustee, Frederick E. Bennett, 42 Cank Street, Leicester, I.A. Dated April 17; filed April 20. Liabilities unsecured, 106*l.* 9*s.* 10*d.*; estimated net assets, 148*l.* 10*s.* The creditors include Messrs. E. H. Butler & Son, Leicester (15*l.*); T. Howard Lloyd & Co., Leicester (18*l.*); Bourne, Johnson & Latimer, London (11*l.*); and H. Hanson, Leicester (50*l.*).

New Companies and Company News.

NORMANDY'S PATENT MARINE AERATED FRESH-WATER CO., LTD.—Capital 25,000*l.*, in 1*l.* shares. F. Normandy is the first director. Registered office, Normandy Street, Victoria Dock Road, London, E.

SODA FOUNTAINS, LTD.—Capital 4,000*l.*, in 1*l.* shares (1,000 preference). Objects: To carry on the business of manufacturers, importers and exporters of and dealers in American and other soda fountains and mineral-water apparatus and machinery, etc. No initial public issue. The subscribers are to appoint the first two directors. Qualification one share. Remuneration of first two directors 100*l.* per annum and 10 per cent. of the net profits remaining after 6 per cent. has been paid on the preference and 10 per cent. on the ordinary shares, div.

GEDDES MANUFACTURING CO., LTD.—Capital 2,000*l.*, in 1*l.* shares. Objects: To acquire the business of the Geddes Manufacturing Co., Ltd., lately carried on at Merton House, Salisbury Court, E.C., to carry on the business of manufacturers of and dealers in patent medicines, medical preparations, drugs, horse rugs, horse clothing, etc., and to adopt an agreement with H. B. Rohss. The first subscribers are R. H. Reeds, Southampton, pastry cook; W. E. Johnson, Southampton, chemist; J. G. Goater, Southampton, builder; W. G. Coater, Southampton, managing clerk; Mrs. A. R. Rohss, Southampton; Miss A. Plunkett, Bristol; and H. B. Rohss, Southampton, auctioneer. No initial public issue. The first directors are H. B. Rohss (permanent chairman), W. E. Johnson, and R. H. Reed. Qualification (except H. B. Rohss) 5*l.* Remuneration (except managing director or assistant managing director) as fixed by the company. Registered office, 1 Portwood Road, Southampton.

DR. WATERHOUSE, LTD.—Capital 3,000*l.*, in 1*l.* shares. Registered in Edinburgh. Objects: To carry on the business of surgeon-dentist at Glasgow and Motherwell; to extract, mount, stop teeth, etc.; to undertake tuition in American and other methods of surgical and mechanical dental work, and to promote advanced methods in operative dental surgery and dentistry. The first subscribers are Aquila Waterhouse, dental surgeon, 206 Sauchiehall Street, Glasgow; Thomas Fielding Tracey, dental surgeon, 332 St. Vincent Street, Glasgow; Wm. Waterston Pinkerton, dental surgeon, 285 Crown Street, Glasgow; Alex. Crerar, dental surgeon, 206 Sauchiehall Street, Glasgow; Thomas Charles Benson, dental surgeon, 8 Belgrave Terrace, Glasgow; Thomas Bernard Beamish, dental surgeon, 12 Newton Street, Glasgow; Thomas Brownlie Carson, dental surgeon, 429 Rutherglen Road, Glasgow. First director, and chairman of the board, Aquila Waterhouse.

AUSTIN'S, LTD.—Capital 10,000*l.*, in 1*l.* shares (6,000 5 per cent. preference). Objects: To acquire the business carried on at 196 to 202 Bermondsey Street, S.E., by H. F. Austin, under the styles of "E. Austin & Co." and "H. F. Austin," and to carry on the business of manufacturing and pharmaceutical chemists, druggists, etc. The first subscribers are: H. F. Austin, 198 Bermondsey Street, S.E., pharmaceutical chemist; A. Austin, Carn Brea, Colebrooke Road, Bexhill-on-Sea, retired merchant; G. M. Stapley, 9 Green Lane Gardens, Ilford, merchant; J. Veale-Williams, 104 Birch-aner Road, S. Norwood, chemist's manager; W. J. Gough, 26 Glengall Road, Peckham, traveller; C. R. Hirst, 452 Green Street, Upton Park, E., clerk; and H. P. Archer, 22 Gt. St. Helens, E.C., C.A. No initial public issue. The first directors are H. F. Austin, A. Austin, G. M. Stapley, J. Veale-Williams. Qualification (except first directors) 100 shares. Remuneration 1 guinea each per board meeting attended (maximum for any director 25 guineas per annum). Registered office, 193 Bermondsey Street, S.E.

BORAX CONSOLIDATED, LTD.—The directors have declared an interim dividend of 5*s.* per share in respect of the quarter ended December 31, 1905, being at the rate of 10 per cent. per annum on the ordinary shares.

CIVIL SERVICE CO-OPERATIVE SOCIETY, LTD.—The report for the year ended February 24, 1906, states that the purchases amounted to 328,255*l.* and the sales to 397,787*l.* The value of the trading stock on February 24, 1906, was 127,749*l.* and the net profit, after appropriating 524*l.* for depreciation of fittings, etc., amounts to 11,327*l.*

TAYLORS' DRUG COMPANY, LTD.—A trust-deed dated March 29, 1906, securing 30,000*l.* of 5-per-cent. debentures, created by resolution of December 19, 1905, has been registered. An issue on March 29 of 14,100*l.* debentures, part of the series, has also been registered. There has previously been issued of the same series 15,900*l.*

EDWARD COOK & CO., LTD.—The eighth annual meeting of this company was held at the East London Soap-works, Bow, on April 24. Mr. Samuel Hall, F.I.C., F.C.S., presiding. In presenting the directors' report and balance-sheet for 1905, the Chairman said the year had been characterised by considerable improvements in the works, including a new box-making-shop and the addition of another large soap-boiling pan. He alluded to the success of various new soaps that had been introduced, adding that the first application under the new Trade-marks Act was on the subject of the company's "Lightning" soap. An undivided profit of 9,058*l.* is to be carried forward. He moved the adoption of the report and accounts. Mr. S. Godfrey Hall seconded, and the motion was unanimously agreed to. The Chairman was re-elected a director, and the auditors, Messrs. Deloitte, Plender, Griffiths & Co., were reappointed.

BENGER'S FOOD, LTD.—The report of the directors for the year ended March 31, 1906, states that, after providing for depreciation, directors' and auditors' fees, and income-tax, the trading for the year has resulted in a profit of 47,973*l.* 18*s.* 10*d.*, added to which the balance brought forward from last year (12,213*l.* 15*s.* 2*d.*) makes a total of 60,187*l.* 14*s.* Out of this the directors have paid the interim dividend on the cumulative preference shares to September 30, 1905, also an interim dividend of 9*d.* per share on the ordinary shares, and have transferred 3,775*l.* to advertising and extension of business account and 10,000*l.* to reserve. After paying the balance dividend on the preference shares, they recommend that a further dividend of 1*s.* 3*d.* per share be paid upon the ordinary shares (making 2*s.* for the year). The appropriations already made will absorb 27,650*l.*, and leave a balance of 32,537*l.* 14*s.* to be dealt with by the shareholders. After payment of the half-yearly dividend on the preference, and the proposed dividend upon the ordinary shares, there will remain a balance of 12,412*l.* 14*s.* to be carried forward. The directors report that the sales of the various products of the company continue to be well maintained. An agency was established in the United States during the autumn of last year.

ARMY AND NAVY CO-OPERATIVE SOCIETY, LTD.—At the annual meeting of the shareholders held on April 20, Lord Ebury (the chairman), in the course of his remarks, said it might interest the shareholders to know that the association of retail chemists which adopted the title of the Pharmaceutical Society—which some years since desired either to disestablish the company's drug-department or to educate the directors up to the same level as themselves—were again on "the war path." Their pretensions were somewhat curtailed, but they were still quite inadmissible, and they did not seem likely to gain much support even in the present queerly composed House of Commons—(laughter)—but with confiscation in the air and all the institutions of the country in the melting-pot, it was quite impossible to predict what anybody might get out of the "scramble." This brought him to another subject, which, although not quite fully developed, is of serious interest to all distributing societies and their customers. There is a movement afloat with the ominous title of "Price Maintenance"—a movement among manufacturers, wholesale dealers, and retail dealers ostensibly against the stores, but in reality against consumers generally. The contemplated machinery is to increase in as many trades as possible the number of proprietary articles until they cover a very wide field, and to impose on each of those articles for manufacturer, wholesale dealer, and retail dealer what they call "a living profit," the extent of which might be gathered from the fact that the minimum profit of the retail dealer is to be 25 per cent. What the maximum profit is to be is not stated; he supposed that this would depend upon the way in which the monopoly works. He did not presume adversely to criticise such a movement, but he had very grave doubts whether it would work. Combination against the stores would mean combination by the stores, and he did not think there is much doubt into which scale the consumer would throw his overwhelming weight, because he must have been taught, by a generation's experience of immunity from extravagant charges, not to fall into the trap which is so ostentatiously set before his eye. Personally, he felt rather grateful to the promoters of the movement, for its literature would teach those who thought that the stores ought to serve them for nothing how very much better off they are than they would be if the stores did not intervene for their protection.

Chemists' Exhibition.

THE exhibition promoted by the "British and Colonial Druggist" is being held this week at the Royal Horticultural Hall, Vincent Square, Westminster, London, S.W., and is proving a considerable attraction to both London and provincial chemists. The hall, a well-lighted one, is well filled with exhibitors' stalls. An attempt has been made in the following pages to report on all novelties and to classify the exhibitors according to the goods shown.

AERATED WATERS AND FILTERS.

THE BERKEFELD FILTER CO., LTD., are exhibiting their filters in various forms and "Winco" barrel-pumps, which many chemists find useful in their cellars and storerooms.

CAMWAL, LTD., make their space into a reception-room where the representatives interview customers or explain the Camwal system to those who have not yet fallen under their spell. There is some new advertising-matter which the company's agents should inquire about—lighting-up tables and cardboard presentments of bottles of aerated water and ginger-beer.

FARROW & JACKSON, LTD., take the visitor into the intricacies of aerated-water machinery, particularly in the direction of supplying aerated water on draught. The "Chemist's" fountain is a simple form of the latter class of apparatus. For those chemists who do their own aerating there is the new "Rotary" pyramid machine. It works with compressed gas and fills three bottles at a time, the rotation of the bottles when in position sufficing to effect complete aeration of the water.

IDRIS & CO., LTD., have struck an interesting note in the fact that Igmandi Bitter Water, the Hungarian Natural Mineral Water of which they are the sole importers, is possessed of radio-active properties. This radio-activity, according to the "Lancet," "is doubtless derived from the salts in solution, among which is calcium sulphate. Even in bottle the radio-activity is preserved for a considerable time." The usual range of Idris table-waters is shown in syphon and bottle, besides Vichy water (in syphon), "Dis-tilidris," "Salidris," and "Tonalka." The patent "China-way" syphon-spout has been further improved, so that now it is more elegant than of yore and the water flows easier through it.

INGRAM & ROYLE, LTD., have their usual exhibit of natural mineral waters, the most important being Vichy, Hunyadi János, and Contrexéville. Visitors should leave their names and addresses for the new edition of "Natural Mineral Waters: Their Properties and Uses."

STILES, LTD., have samples of their London-made soda-fountains on show. The kinds range from the "Regent," at twenty-five guineas, to the "Belgravia," at 150 guineas. Here are also soda-fountain accessories of all kinds, and we noticed a drink "sharpener" called "Lactate," which when added to orange or soda syrup increases the acidity in a way some customers much appreciate.

DISINFECTANTS.

JEYES' SANITARY COMPOUNDS CO., LTD., are great on "Cyllin" and preparations of "Cyllin." The fact that "Cyllin" preparations are on the P.A.T.A. protected list will commend itself to chemists. With regard to "Cyllin" much is made of the fact that the guaranteed carbolic coefficient of "Cyllin" for *Bacillus typhosus* is now 15.0 instead of 11.0. "Cyllin" bar soap is guaranteed to contain 10 per cent. "Cyllin," equal to 50 per cent. carbolic acid, and yet to be harmless to the skin.

DRUGGISTS' SUNDRIES.

B. F. GOODRICH Co. exhibit rubber goods of all kinds. There are twenty-five varieties of sprays, besides hot-water bags, bandages, baths, cushions, syringes, and urinals. Those weird-looking indiarubber face-masks, ordered by beauty-specialists to be worn at night, are used for preserving the face and applying skin-creams. Indiarubber gloves are now obtainable in many styles: for surgeons the "Non-slip" are favoured, while for photographic use loosely fitting gloves in fawn or mouse-colour are fashionable. The pneumatic-end catheters and stomach-tubes are a speciality of this company, and an improvement on the solid-tipped variety.

FRANCIS NEWBERRY & SONS, LTD., seem to have brought samples of all the portable things they sell at Charterhouse Square; the variety is bewildering. There are put-up photographic solutions and cartridges, selections from 200 kinds of nail-brushes, soothers, soap-cases, lavender salts, atomisers, and Delph-ware dispensing-pots. The "Burnot" benzine is unflammable, and gets over the difficulty which is found in obtaining ordinary benzine by rail, as it is accepted by railway companies without demur. Messrs. Newbery are now the sole agents for the Jacko Dust Co., which accounts for the stuffed monkey at the corner of the stall. There is a new teat which should be acceptable in domestic circles, as it can be used with any bottle, an air-valve ensuring perfect suction.

JOHN SANGER & SONS exhibit a multitude of druggists' sundries in cases of their own manufacture. The shop-fitting section is becoming an important one with Messrs. Sanger, and the handsome wall-case with best plate-glass and mirrored backs which contains the bulk of their specialities is voted cheap at 50% by the chemist visitors, who unanimously admire it. Among the packed specialities are new bath salts in bottles. The salts are delicately perfumed crystals, and are very attractively got up. The price is 1s. per bottle retail. A new series of brilliantines (Carnot Frères') in 2-oz. stoppered bottles is handsome, and, like all the Sanger specialities, bears a good profit to the retailer. The packing of malt extract, malt extract and oil, and the emulsions of cod-liver oil and petroleum is being more extensively gone in for now by this firm, and customer's own name and address is now enamelled free on one-gross tins of tooth-powders and the like. "Pine Cone" tooth-paste (to retail at 6d.), with one tube shown on a smart counter-card, is new, as also are a golden-coloured "Dry Shampoo" and the "Regnas" hair-dye.

SHIRLEY BROTHERS, LTD., have a large display of enamelled-tin boxes of every conceivable kind used by chemists and allied trades, "Nurse Margery" patent soothing-teats, the "Evelina" and other hygienic feeders, as well as various other styles of feeding-bottles. Menthol cones are, of course, one of the Shirley staples, and these are well represented, as well as the now-familiar little brown boxes of menthol and menthol-and-eucalyptus snuffs.

TIDMAN & SON, LTD., have a wide run of druggists' sundries, not forgetting the well-known Tidman's sea-salt and "Pinnacle" soap-stands.

H. A. WANKLYN exerts no soporific influence on the visitors who inspect his neat little exhibit, in spite of the fact that the "Peace Pillow" is his leading line. The pillows are shown in various styles, and, in addition, the well-known "Orlwara" nail-brushes, and a variety of tooth-brushes and showcases for tooth-brushes grace his display. There are, besides, hair-brushes, indiarubber sponges, "Velvey" flesh-rubbers, and rubber friction-straps.

DRUGS AND CHEMICALS.

ALLEN & HANBURY'S, LTD., need no introduction to pharmacists. Their chaste exhibit is a popular place of resort, for there are so many different kinds of things to be seen, and all of them of the best class of production. In the style of packing for pharmaceutical specialities and packed drugs generally this *haut ton* is evident, as elsewhere. Cartons in a delicate shade of grey with white edging and a gold seal look handsome and "good," and although all these packed drugs are put up in specific and distinctive forms, the prices are no higher. There is a variety of new labels and wrappers for toilet-soaps, toilet-powders, etc., and most of the designs are very choice. "Allenburys" malt-extract preparations, besides being packed in amber bottles, are now obtainable in round wide-mouth bottles with screw-caps or in white glazed jars. As a further preventive against accidental poisoning sublimate tablets (1-1,000) are now stamped with a cross and the word "Poison" which persists until the tablet is entirely disintegrated. Fine samples of resinoids produced at the Ware factory are on view in glass show-bottles, as well as specimens of "Allenburys" cachous, capsules, compressed tablets, lozenges, pastilles, perfumes, jujubes, and pills. The "Allenburys" milk-food chocolate is now put

up in penny packets as well as in the 3d. and 6d. sizes. The "Duplex" tablet-machine is also exhibited.

ARMOUR & CO., LTD., have two stands—one, the larger and more ornate, right opposite the main entrance, being devoted to the pepsin and other digestive products of the Armour laboratories, and the other, towards the east end of the hall, given over entirely to toilet-soaps. A list of P.A.T.A. protected Armour preparations is printed in the catalogue, and besides the better-known pepsin products, chemists, in view of the cancer-controversy, will be interested in Trypsin and Glycerole Trypsin. These are put up in 1-oz. and 4-oz. sizes, the prices for the glycerole being 2s. 6d. and 7s. 6d. respectively. A series of preparations compounded from the Armour formulary is shown as indicative of what may be done by the pharmacist in the way of elegant pharmacy. In the soap section the "Sylvan" series (P.A.T.A. protected) is noteworthy, but the "Pierre" series, got up in the French style, has a Gallic touch about it that makes it hard to remember that it was not manufactured in France. The "Pierre" soaps include "Savons Violette," "Au Lilas du Perse," "Violette de Parme," and "A la Rose." Passing to the medicinal series, we note "Lettuce" (anti-corpulency) soap and "Pond's Extract" soap. The latter is made by Armour & Co., of Chicago, under exclusive licence from the Pond's Extract Co. This soap is having something of a vogue as an antiseptic and healer. "Florafoam" is a shaving-jelly put up in attractive collapsible tubes to retail at 1s.

BAISS BROS. & STEVENSON, LTD., are strongest in cod-liver oil emulsion. There are many emulsions in the exhibition, but none finer in appearance and flavour than Bais's, and its keeping properties are said to be unimpeachable. The stand shows five different styles in which the company put up this popular emulsion, and the show-bottles (3 ft. 6 in. high) and dummies for window-display on view all help to sell the goods. The "Hans Nielsen" cod-liver oil and cod-liver oil emulsion in unique-shaped (registered) bottles are distinctive and original; while there are also novel packings of health salts ("Ald-Gate," "Tower Bridge," and other picture tins), effervescent salines, witch-hazel and malt extracts. Among a host of attractive counter-specialties may be mentioned also Carlsbad salts, containing $\frac{1}{2}$ lb. weight of salts in each bottle, the whole enclosed in a pretty carton to retail at 1s. 6d.

ROBERT BLACKIE, whose speciality is packed toilet-articles and milled ointments, has a large array of the various lines he manufactures. A price-list has now been issued, as the number of articles manufactured has been increased very much within the last few months. Java powder and tooth-powders are attracting as much attention as the milled ointments, to which reference has been made in THE CHEMIST AND DRUGGIST on several occasions.

ARTHUR H. COX & CO., LTD., the pill and tablet experts, are very much to the fore. One of the most magnetic things in an attractive exhibit is the design, in coloured pills of various coatings, of the firm's trade-mark. Another curiosity is a number of pill-sections, showing the coatings of a little liver-pill which has been coated on about twenty different occasions and in different colours, one coating on top of the other. The section shows not only the evenness of the coating, but also the solubility, as each coating flakes off if tried. Besides many examples of tinted coatings, sugar coating, gelatin, and gelatinous coatings, there are pills on view in coats of silver and of gold. Among the latest packed specialties are "Capsulated Hamaglobin ovals" for the hair in tubes of twenty-five to retail at 1s. (cost 4s. per dozen), and "Laxatonic" pills (aloin, strychnine, ipecac., etc.), a sixpenny line which costs 2s. 6d. per dozen. Messrs. Cox & Co., Ltd., have opened a London office at 37 Berners Street, W., principally for the convenience of their country customers.

EVANS SONS LESCHER & WEBB, LTD., are showing packed goods chiefly. We noticed a good range of effervescent saline with handsome cartons in gold relief on a ground of blue, red, and green. A new style of packing confection of senna in upright pots points a way to popularising this safe but effectual laxative, and does away with the messy operation of filling the pots in the retail pharmacy. The "Eastern" *pot-pourri*, put up in square canisters decorated in willow-pattern, is a saleable line at 1s. to 1s. 3d. The

new water-sterilising tablets by Nesfield's process will attract many pharmacists, as it is the first time a really effective water-steriliser has been placed on the market that can be manipulated by the man in the street as effectually as by the scientist. The process involves the use of three kinds of tablets, one each of A and B being crushed, mixed with a little water, and added to a pint and a half of water to be sterilised. After this has stood for a few minutes, one of the C tablets is added, and the water stirred until the colour disappears. Chemists should not forget to notice the flavour of the Montserrat lime-juice and sulphur lozenges—it is excellent; and the price and style of package will probably decide most chemists that the lozenges are desirable additions to stock.

HEARON, SQUIRE & FRANCIS, LTD., specialise in pharmaceutical preparations, capsules, perles, compressed tablets, pills (oval and round), suppositories, and granular effervescents being shown in great variety. "Narcissus" perfume is the newest scent, and bids fair to rival the popularity of the sweet-pea perfume which has had such a long run. The bunches of sweet pea on this stand are real, although most unusual at this time of the year. Antiseptic pastilles, in boxes and bulk, are not unpleasant in flavour, and quite effectual in throat-affections. "Otango" is the latest thing for warding off insects that sting; it is one of the productions of the firm of Francis, Son & Naylor, who also show packed goods in embarrassing variety. Glycerin and coal-tar soap is also much in evidence; there are two kinds, toilet and medicinal.

PARKE, DAVIS & Co. are particularly strong on pepsin preparations. These they guarantee to be exceptionally free from mucus, peptone, and decomposition-products. They are, like all the P. D. preparations, carefully packed, and show evidence of scientific pharmacy. The list includes essence of pepsin, glycerole of pepsin, lactated pepsin, pepsin cordial, saccharated pepsin, and pepsin tablets. A feature is likewise being made of the P. D. & Co. specialties on the P.A.T.A. list. Effervescent preparations, cod-liver oil emulsion, and a liquid dentifrice with chemist's own label are a few among many things with which Mr. H. Hickey, Mr. Sidney Jamieson, and their colleagues are interesting the visitors, and of which they talk with earnestness and conviction in the cosy corner beside the stand.

REITMEYER & Co. are showing glycerophosphates, muiracithin, and antiarthrin, the last-named being a gout-remedy. The feeding-apparatus of Professor Soxhlet is also to the fore; it is an exclusive manufacture of the Royal Bavarian Rubber-works, of Munich. The indiarubber goods shown at this stand are those of the Bavarian company, special lines being tubing and cut sheet.

W. R. WARNER & Co. show pills, tablets, and effervescent salts. A variety of boxed "beans" are on offer—kidney-beans, liver-beans, and blood-beans—and are made from tried formulae. A new variety of Bland's pill, containing arsenic and manganese, was shown to our representative, and also an anticonstipation tablet, new in this form but made from a well-known recipe of Dr. Hinkle. "Eouine" is a distinctive name for a violet-coloured beautifully scented cachou which has just been brought out by this firm.

WOOLLEYS, LTD., report continued success with the "Chemists" emulsion. "It has stood the test of time, the price is right, and it is only supplied to registered chemists" is how the virtues were summed up to our representative. Petroleum emulsion is the sister to the cod-liver emulsion which has recently been introduced. The emulsion is beautifully white, creamy in consistence, and quite stable. The petroleum emulsion was not put on the market until its keeping-properties had been thoroughly tested, so that there need be no hesitation in stocking it. It is supplied, like the cod-liver oil emulsion, to chemists only.

WYLEYS, LTD., are showing packed goods as well as galenicals. The milled ointments in pots on the counter are invitingly placed for testing-purposes, and pharmacists seem automatically to rub a small piece of one of the ointments on the skin of the hand and as mechanically to express approval of the product. The lime-juice and sulphur lozenges shown are of the compressed variety, and, being exact in size, are well adapted for packing-purposes, some boxes of compressed lozenges being exhibited to demon-

strate this advantage. Here may be seen such up-to-date counter-goods as hæmoglobin capsules, blood-tablets, gout and rheumatism bath salt, and chocolate-coated indigestion-pellets, besides some of the better-known packed articles.

FOODS AND INVALIDS' DELICACIES.

BRAND & CO., LTD., conjure up in the mind of a chemist with philosophic leanings a vision of millions of tins of essence of beef and thousands of lives that have depended on a supply of this beautiful amber jelly in the hour of need. The sale keeps increasing, and in bottle form—the newer package—the brilliancy of the essence is shown off to perfection. Brand's meat-juice with soda-water—add the juice to the water—is a pleasant-tasting reviver, with the advantage over alcohol that its effects are not evanescent.

SCOTT, MORGAN & CO. report that "Virogen" is progressing in favour, with the medical profession and the public, at lightning speed. Combinations of "Virogen" with cocoa and chocolate are the latest forms, and a "Virogen" wine is maturing whose virtues are soon to be announced to the trade. The new transparent showcards are high-class ornaments for the pharmacy.

MACHINERY.

BENNETT, SONS & SHEARS, LTD., have an exhibit in copper, the goods shown being chiefly in that metal. The small stills for retail chemists are perhaps the chief attraction—a new variety of the "Auto" still, holding only a gallon, being one which the Inland Revenue authorities are willing to permit chemists to use without restriction. The reliability of the Buckley-Bennett hand tablet-machine is being demonstrated, and particulars are also being supplied of the Holdsworth filling-machine. The last-named machine is specially intended for dealing with semi-solids, such as are usually put into collapsible tubes.

WM. GARDNER & SONS, LTD., show several novelties in pharmaceutical machinery. The hand-driven dressing-machine is an adaptation of one of the older sifters, but is for smaller quantities of powder, especially face and toilet powders, where exceptionally fine dressing is desired. There is also a new apparatus for straining and mixing sauces, creams, and thick liquids, in which a series of brushes act on a strainer of wire gauze. Drawings and photographs of a citrate-of-magnesia plant are displayed on the walls of the stand, the particular plant figured being of a capacity of 2 tons a week. It embodies some new ideas.

PHOTOGRAPHIC AND OPTICAL GOODS.

THE ANGLO-AMERICAN OPTICAL CO. exhibit eye-testing apparatus. The "C. & R." schematic eye is an improved model of the eye for practice-purposes. The interior is filled with water, and the total refractive power and corneal curvature of the model are as nearly as possible the same as in the natural eye. As a window-attraction the clock-work astigmatic test is shown in cheaper form, and amid a large variety of spectacles and clips the "Stanley Guard" astigmatic clip is a noticeable departure from the ordinary run, the improvement being in the placquets. The second edition of Druiff's "Refraction" is also on show.

W. BUTCHER & SONS have several novelties in photographic goods. The "Stereo" folding plate-camera is new, as is also the "Cameo" film pack-adaptor, a light-weighting slide for using cut films with cameo cameras. The "Coronet" stand set at 30s. is a satisfying outfit; it has a R.R. lens with automatic shutter, and is otherwise quite up-to-date. In photographic sundries the "Cardinal" copper lamp is as imposing as the dignity after which it is named, the nest of dark-room measures is specially adapted for use in dimly lighted sanctums, the combined measure and funnel bottle has a neck in the shape of a funnel (of obvious advantage to amateur compounders), and there is a spotting-outfit in which blocks (not dabs) of paint are provided. More we could say, but space does not allow of a more detailed description.

HOUGHTONS, LTD., are in a good position for showing the various styles of cameras they manufacture. Some of the new cameras have been recently referred to in *THE CHEMIST AND DRUGGIST*, but the advantages of the auxiliary shutter fitted to the "Klitos" were not emphasised. This shutter completely cuts off the part of the camera behind the lens and gives an opportunity to the user to try the working of

the shutter proper without risking fogging the films or plates. The 25s. "Klito" has rack focussing-adjustment, and the lens is so arranged that it can be withdrawn bodily for cleaning. The "Tudor" folding cameras, which range in price from 27s. 6d. to 10l., are well worth attention. The "Ensign" films are further improved in quality, and are now provided with a distinctive outer carton. The "Houghton" film-envelope is catching on wonderfully.

J. E. LOCKYER is showing his photographic preparations, among them dry developers put up in twopenny tubes. These are packed half a dozen tubes in a box. The "Evelyn" 2d. developers in solution are put up four on a card for display in the shop, each liquid developer being sent out in bulk in one-dozen boxes.

CHAS. TYLER & ENGLAND BROS., LTD., have a photographic exhibit which includes the following new or improved cameras: "No. 2 Empire" (with roller-blind shutter, selling at 50s.), "Guinea Empire" (with R.R. lens), "Excelsior No. 4" (fitted with Aldis lens, at 4l. 15s.), "Teb No. 8" (postcard size, for plates or films), and "Teb No. 5" (with R.R. lens and "Unicum" shutter). The selection of mounts is excellent, the newest style being the shaded-colour mounts. Panel mounts now so popular are in great variety.

CHAS. ZIMMERMANN & CO. show photographic goods. "Unal" is a dry form of rodinal which will tend to replace the older and only liquid developing-agent. The "Ernemann" cameras are of the folding variety, and the ingenious way in which the view-finder automatically tucks itself inside the camera boundary is a novel and useful feature. The "Chamois" platino-matt paper is new, the base colour being in tint like chamois leather, but the image can be produced in a variety of tones.

PLASTERS.

A. DE ST. DALMAS & CO. have their usual apparently interminable assortment of plaster-combinations and surgical sundries. The "Varico" leg-bandage is being drawn special attention to, as being infinitely lighter and cooler than the ordinary elastic bandage or stocking, and adjustable to any pressure. The price of the 9 by 2½ size is 21s. per dozen net, and the 12 by 2½ size costs 27s. per dozen. The penny box of corn-silk (two salicylic acid and Indian hemp plasters in a box) is neat, and should sell easily. These plasters are so thin that they do not take up room in the boot. Manna cake, for which Messrs. St. Dalmás have acquired the sole right of manufacture, is shown packed in 1s. 1½d. tins.

PROPRIETARY ARTICLES.

THE ALEXANDER MANUFACTURING CO., LTD., exhibit "Reveille" pills, hidden in the name of which military-minded or linguistic chemists will discover a subtle joke. The company make lavish offers to chemists who stock the pills, the advertising-matter including well-modelled figures of a bugler sounding the reveille—an attraction to any shop-window. The price of the pills is protected by the P.A.T.A.

ANTURIC SALTS, LTD., exhibit "Anturic" bath-salts, "a pleasant, harmless, and homely remedy for gout, rheumatism, and every other uric-acid disease." The red canisters containing the salt are an attractive feature of this white-and-green stall.

THE CAPSULOID CO., LTD., exhibit "Capsuloids" for the hair and "Tablones" for indigestion—P.A.T.A. articles for which special showcards and advertising-matter are supplied. The new article at this stall is a pure hair-soap specially prepared for washing the hair. The soap is put up in distinctive flask-shaped ivory cases, and retails at 2s. 6d. Note that there are two kinds—A for greasy hair and B for dry hair—and that the soap is supplied with various perfumes. "Antitoxine" is here shown, but should not be confounded with antidiphtheritic serum. "Antitoxine" is a "heart-strengthening antipyretic and antineuralgic" remedy.

DAISY, LTD., have a stand covered with mechanical contrivances for stimulating popular curiosity, besides posters, showcards, and other novelties calculated to spread the fame of "Daisy" powders. One of the latest ingenuties is the "Daisy" magnetic top, which keeps tiny teaspoons and wires squirming at its base as it revolves.

RUDOLPH DEMUTH is explaining the advantages of

"Risiccol." Risiccol is the new name of Demuth's castor-oil powder, which has received commendation in *THE CHEMIST AND DRUGGIST*, and is being favourably received in medical and pharmaceutical quarters. Mr. Demuth has also devised powdered forms of santal oil, creosote, male-fern, and cod-liver oil. The last-named is a yellowish powder with a good percentage of cod-liver oil, and has only just been finished in time to show at this exhibition.

W. T. OWBRIDGE, LTD., have an attractive little show of the Owbridge specialities, which now include, besides the lung-tonic, pills, and embrocation, "Hæmorrhoidyne," Owbridge's stomachic, "Brown Salve," dog-powders, and mange-ointment. A plethora of showcards and advertising novelties is on view.

TOILET-PREPARATIONS AND PERFUMES.

THOMAS CHRISTY & Co. have erected quite a new stand for the occasion, on which are tastefully arranged many of the Christy specialities. Prominent in centre is a handsome case of the perfumery and toilet products of M. Ch. Fay, of Paris, for whom Messrs. Christy & Co. are agents in this country. Mr. Gilbert Christy, who is in charge, is justly proud of these products. Each label is a work of art, and all the products are, he tells us, the acme of the perfumer's art. The Fay goods are certainly of the highest class, and although the chemist may consider 42s. per dozen a stiff price for "Veloutine" toilet-powder, his customer, when once she has used it, will want more. To good-class West-end business the Fay specialities will need little commendation. Among a multitude of other novelties a new kind of suppository-machine may be seen. Two metal stands, joined together at the bottom, have six brass moulds (each of which splits) fixed at intervals along each holder. When filled and cooled a screw unlooses the brass moulds, caught by clips, and they are taken out separately from the fixed metal stands, each arc is opened, and the finished suppository taken out. The machine is quite new, ingenious, and effective. The moulds are in three sizes. Messrs. Christy have recently adopted a new style of sending out packed goods (in collapsible tubes, tins, etc.) by fixing in a card box which, when unfolded, may be hung up or placed on the counter for display. "Imperios" bath-salt, in nicely decorated tins of a novel diamond shape, is being put on the market as a remedy for rheumatism, sciatica, and such-like affections. The price is 2s. 6d. per tin, and the bath-salt is not claimed to be a cure for these diseases, but is guaranteed to help towards cure. This is the season of the year when chemists should see that their stock of "Quassine" is adequate. Mr. Christy and his representatives will give all particulars.

THE CROWN PERFUMERY Co. have one of the largest—if not the largest—stands in the exhibition. It is square in form, with an abundance of floral decoration that gives an added grace to the beautifully produced toilet-specialities of the company. In the centre a mammoth bottle of "Crown Apple Blossoms" shows that the old favourite is still a favourite, and the crown with electric lights which is suspended in the centre forcibly reminds one of the claim of the "Crown" products to the rank of royalty in the kingdom of perfumery. The perfumes and toilet-articles are too numerous to specify, but visitors will do well to look at "Savon aux Violettes," one of the latest productions of the company—three cakes of soap in a handsome box of old-gold-coloured leatherette with a raised badge of brown silk on the top. The retail price is 7s. 6d. per box. "Lait de Fleurs," guaranteed to keep any length of time in any climate, is a new skin emollient and beautifier that is put up in 6d. and 1s. bottles. The latest perfume is the "Jeunesse Dorée" series, which sells at 10s. 6d. per bottle. The bottles are handsome squares, and the get-up is *chic*.

THE ERASMIC Co., LTD., as usual, have a very pretty exhibit. The series of "Erasmic" perfumes is being continually added to, and all are elegantly produced. The "Duchess" series of toilet-soaps has also been lengthened and strengthened, and another twopenny line of soaps recently introduced is the "Mikado." At present the "Mikado" series includes buttermilk, glycerine-and-cucumber, rose, brown Windsor, oatmeal, and Parma violet, and like the "Duchess," these soaps are beautifully milled and soft and marvellous for the money asked for them. Shaving-tablets are now put up in red-coloured cartons, and shaving-

sticks in red leatherette-covered cases, six bijou sticks being given with each two-dozen order.

JOHN GOSNELL & Co., LTD., have "Cherry Blossom," "Famora," and "Cherry" tooth-paste as features of their exhibit, and, in addition, have "Acacia Rose," "Cherry Rose," and "Gloire du Printemps," the last named being the latest introduction. "Cherry" tooth-paste is now obtainable in collapsible tubes, as well as in the familiar pots. What we took to be an ancient lock and key turned out to be a new style of box for holding bottles of perfume. The box exactly reproduces the appearance of a 500-year-old lock and key, and is called the "Ancient Relics" box.

INTERNATIONAL SPONGE IMPORTERS, LTD. (Cresswell Bros. & Schmitz branch), have a stall built up of sponges—a large sponge, 4 ft. across, being placed over the door. The town and country representatives of the company are there to receive chemists. Despite the fact that sponges are dearer than they have been for some time, the popularity of sponge increases with the public. It is curious to note that elephant-ear Turkey sponge, formerly exclusively used for surgical purposes, is being increasingly favoured for toilet-purposes. "La Japonaise," the combination of loofah and sponge, which is used as an adjunct to the bath, has taken the public fancy, as it is pleasanter to use than a loofah *per se*.

J. S. W. PREPARATIONS, LTD., are exhibiting the various toilet-articles with which "John Strange Winter's" name is associated. Mr. Stannard gave our representative a reprint of a recent article in "Truth" in which the ill-natured remarks of a certain medical journal were fittingly replied to. The moral is that chemists need have no fear but that the J.S.W. preparations are honest, and inferior to nothing in their particular sphere.

LAMONT, CORLISS & Co. show the "Marvel" spray, Mennen's toilet-powder, "Hydrozone," and "Glycozone," but the attraction is the display of "Javal" hair-tonic. This hair-tonic is put up in distinctive-shaped bottles, with boldly lettered labels, and enclosed in a good-looking carton.

THE LESCOL PERFUMERY Co. make a very creditable first appearance. The stall is new, neat, and attractive, and the perfumery (including "Lescol Bouquet," "Nicosia," "Royal Red Rose," and "Anvar-Kama") has been reinforced by well-packed and well-finished "Lescol" toilet-soaps, shaving-soaps, shaving-creams, toilet-creams, dentifrice-paste, and dentifrice-powder. The last-named has caught on particularly well, and sells like hot cakes at 4½d. per tin.

FRANK NEWBURY has one or two additions to his tonsorial specialities. The "A1" shaving-outfits, for travelling-purposes, consist of a strop, a patent cup shaving-brush, a stick of soap, an antiseptic block, and a razor—all neatly packed in a pretty leatherette case. The wholesale price is 90s. per dozen, but there is a bigger size in solid leather case, which contains a razor with a patent handle and other improvements, the price of which is 156s. per dozen.

NICHOLS & SELLERS show the "Lambert-Snyder" vibrator, Dr. Vaux's scalp-sprayer fountain-comb, and Ayvad's water-wings. The advantages of these articles were being vigorously explained, and many visitors submitted to a dose of the vibrator. At this stall are also being exhibited the toilet preparations of Madame De Medici, a Bond Street beauty-specialist.

OOWANA, LTD., exhibit a novelty in shaving-soap. This is a roller of "Oowana" mounted in a handle with which one rolls the moistened beard before shaving. The attendant advanced what seemed cogent reasons in support of the new method of soaping the face, and perhaps the same arguments would hold when addressed to the general public. "Oowana" bath-tablet is an extra large size of "Oowana" soap selling at 7½d., and there is an attractive new style of packing the 2s. 6d. tablets of soap, two in a box, that adds nothing to the retail price, as the box of two cakes sells at 5s.

MRS. POMEROY, LTD., have a show of the various toilet-preparations associated with this company. The "Pomeroy Skin-food" is now reduced in price, a 1s. 6d. size being obtainable. The "Pomeroy Liquid Powder," a seemingly paradoxical state of matter, is explained when it is stated that the liquid contains a powder in suspension which is deposited on the face in manner more even and effective than is possible in the ordinary way of applying powders.

PRICES' PATENT CANDLE CO., LTD., have a pretty triangular exhibit near the centre of the hall. Besides some really elegant samples of finished toilet-soaps, the company are exhibiting edible soaps, and samples of raw materials (soap-fats, etc.) employed in the manufacture of soap. The ever-popular "Regina" soap is shown, but now there are a "Regina Cream," a "Regina Violet," and a "White Regina" as well. "Glycerin Cream" nursery-soap is a combination of pure super-fatted soap and Price's glycerin. Special attention is being directed, however, to an artistic selection of boxes and wrappers suitable for chemists' own toilet-soaps. These soaps are specially manufactured and reserved exclusively for chemists.

VINOLIA CO., LTD., embarrass and harass the press-man by the bewildering variety of toilet-preparations, soaps, and perfumes which they show. Our attention was, however, soon fixed on a new line of perfumes—the "Otala" series—which are up to the moment of going to press the acme of the company's perfumes. Whether this will hold good through next week we cannot say, as progress and enterprise are written over the front door at Malden Crescent. If you want to know anything about "rosin in soap," you can hear it first-hand at this florally roofed stall and get a sample of "Vinolia White Bar" soap, which is as free from rosin as the driven snow. "Vinolia White Coal-tar Foamlet," which sells at 3½d., is a new form of coal-tar soap.

OTHER EXHIBITORS

JUDD & MANNERS, the valuers, interview buyers and sellers of businesses, and are advantageously placed for peace, quiet, and confidential chats. Mrs. Ada Ballin, British Ring Syndicate, J. T. Burden, Friedrichshall, J. E. Garratt, E. & R. Garrould, Horlick's Malted Milk Co., Howison & Co., R. J. Reuter, Rotary Photographic Co., Ltd., F. Sharman, and Young's Patent Hygienic Bin Co. also display their special goods.

Dental Surgeons' Exhibition.

A SMALL exhibition devoted to dental instruments, medicaments, and accessories is in progress at the Cavendish Rooms, Mortimer Street, London, W. Just inside is an exhibit of "Glyco-Thymoline" by Messrs. Thomas Christy & Co., Ltd., a feature being the distribution of samples of this well-known oral disinfectant in bottles that have been specially blown for this exhibition. Next to this is a display of Phillips' "Milk of Magnesia." It is there in original packages and also in show-jars so that the dental profession can get an idea of the appearance as well as the properties of "Milk of Magnesia." Nicely printed booklets tell all about its uses in oral acidity. A little further on we came across a pretty show of "Calox," the oxygen dentifrice. Mr. Stocker, who is in charge, told our representative that he has had an opportunity of explaining the properties and distributing samples of "Calox" among quite a number of dentists, and he thinks chemists who have not yet stocked the new dentifrice should be prepared for the demand which is developing. Messrs. Duncan, Flockhart & Co. have an exhibit of anesthetics, ethyl chloride being prominent. Booklets explaining the correct manner of using ethyl chloride and solution of "Vaso-constrictine" (a suprarenal-gland preparation) are being distributed. Next to this Mr. Joseph Flach's representative is enthusiastic about the uses of stovaine as a local and spinal anæsthetic. Stovaine is supplied in the solid form and also made up in sterile solution ready for use. It is hustling cocaine rather strongly just now. The "Winthrop Sterile Local Anæsthetic" is a product of the Winthrop Manufacturing Co. for local anæsthesia. It is manufactured under the most exacting aseptic conditions by a well-known firm of pharmacists. Messrs. Baillière, Tindall & Cox show a selection of books on dental subjects, and are the publishers of the "Dental Surgeon," the proprietors of which journal have organised the exhibition. Messrs. C. De Trey & Co. are distributing "Somnoforme" literature and particulars of "Petroid" dental cement. "Plasmon" food is shown as a favourable one for developing the teeth of children. Ascher's artificial enamel is shown by Messrs. Schneider & Co., Ltd. The dental-instrument firms exhibiting are Messrs. C. J.

Plucknett & Co. and the American Dental Manufacturing Co.; the former show the latest developments in electric motors and furnaces, as well as dental cabinets, chairs, and spittoons. As an example of present-day trade specialism may be mentioned Messrs. Borgzinner Bros., Ltd., who make all kinds of card and leather boxes for transmitting dentures by post.

Personalities.

MR. DAVID HOWARD, J.P., has been elected Treasurer of the Essex Field Club.

MR. A. E. EKINS, J.P., pharmaceutical chemist, has been appointed Chairman of the St. Albans Board of Guardians.

MR. F. J. OLIVER, chemist and druggist, 43 St. Gabriel's Hill, Maidstone, has been elected a trustee of the poor for the borough.

MR. SAMUEL W. FAIRCHILD, of Fairchild Bros. & Foster, is now in London, and is accompanied on this occasion by his son, Mr. Tappen Fairchild.

MR. J. B. SHATTOCK, chemist and druggist, of Prospect Street, has relinquished the office of treasurer of the mission church, Dale Street, Lancaster.

MR. EDWARD C. SPURGE, B.Sc., F.I.C., manager of the Ozone Vanillin Co., Niagara Falls, N.Y., who has been on a flying visit to London, leaves this week.

MR. W. ARKLE, chemist and druggist, of Penny Street, Lancaster, has been elected people's warden at Christ Church for the tenth year in succession.

MR. WILLIAM HAY, whose success at the Minor examination was reported last week, is a son of the late Mr. William Hay, founder of William Hay, Ltd., essence-manufacturers, Hull.

MR. G. C. ROW, chemist and druggist, has been elected Chairman of the Braintree (Essex) Urban District Council for the ensuing year, and by virtue of the office becomes a justice of the peace for the county.

MR. WILLIAM BOUSFIELD, after thirty years' service, has severed his connection with Messrs. T. J. Smith & Nephew, of Hull. Mr. Bousfield has started in business in partnership with Mr. Casson as manufacturers of bottle-washing machinery and adjuncts, at 38 Waterloo Street, Hull.

THE SAN FRANCISCO EARTHQUAKE has created widespread sympathy with the unfortunate inhabitants, and the American Society in London has started a relief fund. Mr. F. C. van Duzer is the hon. secretary, and other drug-trade representatives on the committee are Messrs. F. M. Fisk, J. Morgan Richards, and Henry S. Wellcome.

BROTHER W. J. PETTY (Messrs. Allen & Hanburys, Ltd.), of the Galen Lodge, No. 2394, and of the Peckham Lodge, No. 1475, has been appointed Secretary of the Peckham Lodge of Instruction, No. 1475, which meets every Tuesday, excepting during the summer months, at the Half-moon Hotel, Herne Hill, at 8 p.m.

MR. WILLIAM MCKINNEL, chemist, Northampton, has had a singular experience. Though he has been in business in the town over forty years, it was not until one morning last week that he visited the General Hospital, and by a strange irony of fate on the evening of the very same day he had to return to the institution through his son meeting with an alarming accident that necessitated an operation.

MR. T. H. W. IDRIS, M.P., is still confined to the Infirmary at St. Asaph as the result of his regrettable motor accident last week. Satisfactory progress was made up to Wednesday, when a change took place, and the patient was reported to be "not so well." Mr. Idris's own doctor went down to St. Asaph on Thursday, and it is fervently hoped by his friends that nothing untoward may retard his speedy recovery and return to his Parliamentary duties.

MOST of the Australian wholesale drug-houses will be represented in London by partners during the year. Mr. H. S. Levy, one of the directors of Messrs. Elliott Bros., Ltd., Sydney, left by the s.s. *Mongolia* on February 28 for London. Mr. Harry S. Bickford, of Messrs. A. M. Bickford & Sons, Ltd., Adelaide, left for England in March. Mr. E. Norton Grimwade, of the firm of Messrs. Felton, Grimwade & Co., Melbourne, will be visiting London soon, when he will be

a delegate from the Melbourne Chamber of Commerce to the Congress which is to be held in London. Among retail pharmacists who will visit the Old Country shortly are Mr. F. C. Allen, Ipswich, Queensland, a member of the Pharmaceutical Council of that State; Mr. J. H. Bennett, Zerang, Vic.; and Mr. J. S. Tingey, Inglewood, N.Z.

Mr. P. O'BRIEN TWIGG, chemist, Shanghai, is now in this country, along with Mrs. Twigg and family, for a few months' holiday. Mr. Twigg was taken out to China as an infant, and in due course was apprenticed in 1881 to Messrs. McTavish & Co., chemists, Shanghai. In 1884 he came to England for further experience, spending five years here, in situations in Bath, Newport-upon-Usk, and London, also studying at Westminster College, and passing the Minor examination on June 21, 1889. He then returned to Shanghai and managed a branch of Messrs. McTavish & Co.'s business until six years ago, when he started business on his own account on Broadway, Shanghai, and has done well. Mr. Twigg will be in this country until October, and letters may be addressed to him at the C. & D. Office, 42 Cannon Street, London, E.C.

Mr. H. A. WOOLNOUGH, of Messrs. Bowen & Co., pharmacists, Melbourne, Vic., is now in London, and will be here for a few weeks, when he will leave for New York *en route* by the Canadian Pacific Railway to Vancouver, thence by ocean to Melbourne again. It is twenty-one years since Mr. Woolnough visited the old country. Then he was a chemist's assistant who, after serving his apprenticeship with Mr. Francis Sutton, F.I.C., Norwich (the performer of volumetric analysis), passed the Minor in July 1873, while still in his teens, and some time later went to Hong-Kong as an assistant to Messrs. A. S. Watson & Co. It was after this engagement that he came home, but he returned again, and at the end of eleven years altogether in China went southwards to Australia. The fact that he is partner in one of the best pharmaceutical businesses in Melbourne and president of the Pharmacy Board of Victoria suffices to show how he has progressed there. He has the practice of pharmacy in Australia at his finger-ends, and this wide knowledge, combined with his ready speech, clear thought, and moderation in his executive powers, has earned for him the reputation of being one of the most influential pharmacists in Australia.

New Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Arssu, D. Carlos H. Y. *Technological Dictionary, English, Spanish, German, French.* Cr. 8vo. 10s. 6d. net. (Spon.)

Berg, A. A. *Manual of Surgical Diagnosis.* Cr. 8vo. 16s. net. (H. Kimpton.)

Briggs, W. *Synopsis of Matriculation Chemistry.* Cr. 8vo. Pp. 93. 1s. 6d. (Clive.)

Deerr, Noel. *Sugar and the Sugar-cane. Elem. Treatise on the Agriculture of the Sugar-cane and on Manufacture of Cane Sugar.* 8½×5½. Pp. 424. 7s. 6d. net. (Simpkin.)

Hewlett, R. Tanner. *Pathology, General and Special.* 8¼×5¼. Pp. 548. 10s. 6d. net. (Clarendon.)

Hutchinson, W. *Handbook of Grasses. Treatment of their Structure, Classification, etc.* Cr. 8vo. Pp. 100. Limp, 1s. (Sonnenschein.)

James, A. F. B. *Nitrate Facts and Figures, 1906.* 8¼×5¾. Pp. 12 and four folding tables. 1s. net. (Mathieson, 16 Copthall Avenue, E.C.) [Gives in a handy form particulars of twenty-seven nitrate companies as regards capital, reserves, profits, balances, dividends, life of property, acreage, quota allotted, etc. The booklet is valuable to commercial men and investors.]

Loach, H. *Ship-captain's Medical Guide.* 14th ed. 7¼×4¾. Pp. 208. 2s. (Simpkin.)

Poehl (A. von), Tarchanoff (J. von), Poehl (Alf. von), and Wachs (P.). *Rational Organotherapy with Reference to Uroscmology.* Vol. 1. 9½×6½. Pp. xi+240. 7s. 6d. net. (Churchill.) [This book consists chiefly of an account of the properties of spermine and other Poehl specialties.]

Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

Atropacecus Alkaloids.—According to Schmidt, the fresh root of belladonna contains only hyoscyamine, and no atropine. The dried root, however, after keeping, contains a little atropine mixed with the hyoscyamine. In the spring and summer the alkaloidal value is higher than in the winter. The dried flowers contain only hyoscyamine, and that to the extent of 0.39 per cent., while the leaves contain both atropine and hyoscyamine. The fruits, both ripe and unripe, are free from atropine, but contain hyoscyamine to the extent of 0.8 per cent. Several other plants were also examined, and the author finds that *Datura Stramonium* contains only hyoscyamine with a little scopolamine. In the case of *D. quercifolia* the leaves contained 0.4 per cent. and the seeds 0.23 per cent. of a mixture of hyoscyamine and scopolamine. *D. arborea* contains chiefly scopolamine, but also a small quantity of hyoscyamine. *D. alba* contains no alkaloid but scopolamine.

Shellac Oil.—Etard and Wallée ("Comptes rendus," 1905, 1603) publish an account of the composition of the oil obtained by the destructive distillation of shellac. They find that 52 per cent. of oil is obtained, 22 per cent. of "coke," and 6 per cent. of gas. The oil was found to be sp. gr. 0.975. On fractional distillation a portion was obtained of a distinct greenish-blue colour, boiling between 170° and 175°, and a larger one between 235° and 240°. This fraction was a polyterpene, combining with its own weight of bromine. From the residue small crystals were obtained melting at 61° to 62°, boiling at 360°, and apparently of the empirical formula C₂₀H₃₀. The acid portion of the oil is stated to be a mixture of oleic, caproic, and sebacic acids. The authors then draw the following extraordinary conclusion—viz., that shellac appears to be the oleate of a continuing series of polyterpenes. [It is well known to be nothing of the kind, and it is difficult to understand how such absurd conclusions can be drawn by any chemists from a study of the products obtained by destructive distillation.—ED. C. & D.]

Evolution of Perfumes.—An important contribution to this subject by Charabot and Hébert recently appeared in the "Bulletin" of the Paris Chemical Society. Using the sweet basil as the basis of their experiments, they find that by daily removing the inflorescences the amount of essential oil is nearly doubled. They consider that the suppression of the organs of fecundation and fructification shows that for these purposes a large amount of odoriferous products is used up, or, at all events, if not the perfume-material itself, those bodies immediately used for its synthesis. They also compare the composition of the various essential oils as follows:

	Test-plants		Plants Deprived of Inflorescences	
	From Green Parts	From Flowers	From Green Parts	From Flowers Removed
		%	%	%
Estragol	61.5	29.7	68.4	42.3
Terpene-compounds	32.5	70.3	31.6	57.7
Linalol	20.4	29.9	24.7	33.4

Removal of Nitrous Acid from Concentrated Nitric and Sulphuric Acids.

Dr. O. Silberrad and Mr. B. J. Smart have communicated to the Society of Chemical Industry the result of experiments carried out at the Royal Arsenal, Woolwich. The experiments were made to determine to what extent the reaction between nitrous acid and amines or amides occurs in concentrated acids. Nitric acid containing a small percentage of nitrous acid was taken either alone or in admixture with sulphuric acid. Various reagents which are known to react readily with nitrous acid in aqueous solution were added to the concentrated acid and allowed to stand at the ordinary temperature. From time to time the amount of nitrous acid present was determined by titration with permanganate. The addition of hydrazine occasions an explosion, and with this exception substances such as urea, lead peroxide, oxamide, methylamine nitrate, and amido-guanidine are very inert towards nitrous acid in presence of concentrated nitric acid, although they react readily enough in dilute solution. The observation of Franchimont that urea nitrate decomposes with evolution of carbon dioxide and nitrous oxide was confirmed.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., April 25.

AT the drug-sales, which were resumed to-day after an interval of four weeks, large supplies of new and old drugs were offered. A fair quantity was disposed of, but the tone was dragging owing to the inordinate length of the auctions. Fine livery Curaçao aloes brought high prices, while Cape sold firmly. Anatto seed still tends easier. Buchu sold at firmer prices. Sumatra benzoin was steady. Cardamoms were in good demand at very irregular prices. Loxa cinchona was about steady. Camphor neglected. Ceylon coca-leaves tended easier, as did also dragon's-blood. Ergot, quite inactive. Gamboge met with a substantial decline. For fine Jamaica honey full prices were paid, but Californian and Australian were neglected. Ipecacuanha was about 1d. easier. Myrrh and menthol were neglected. Patchouli oil and orris were lower on forced sales. Rhubarb was irregular. For grey and native sarsaparilla rather easier prices were paid. Timevelly senna was firm. Bees' wax was dearer in the cases of Madagascar and Jamaica. Apart from the drug-auctions there have been few alterations of importance. English regulus antimony continues to advance, and citric acid is still very firm. Bromides are unaltered. Sugar of lead and castor oil are dearer. Cinchona at auction was steady, and alterations in spices include lower prices for Jamaica ginger and nutmegs. The following table gives the principal alterations of the week :

Higher	Firmer	Easier	Lower
Antimony (Eng reg)	Aloes, Cape	Ammonia sulphate	Calumba
Bayberry-bark	Buchu	Coca-leaves	Gamboge
Cardamom-seed	Cascar. sagrada	Colocynth	Ginger (Jam., old crop)
Castor oil	Star-aniseed	Ipecacuanha	Linseed oil
Coco-nut oil	oil	Nutmegs	Orris
Lead acetate		Palm oil	Patchouli oil
Wax, bees' (Jam. and Madag.)		Sarsaparilla (native and grey Jam.)	Tamarinds

Cablegrams.

HAMBURG, April 26 :—Antimony, citric acid, and agar-agar are firmly held.

NEW YORK, April 26 :—Business is fair. Druggists' opium in case lots is firmer at last week's reduced quotation of \$2.70 per lb. Gamboge is still scarce at \$1.00 per lb. for Siam pipe. Wahoo bark of root is now lower at 30c. per lb. Menthol is firm at \$2.60, the previous price. Peppermint oil is still strong at \$2.75 per lb. in bulk. Mexican sarsaparilla is easier at 9c., as is also ipecacuanha. Rio of which is quoted \$1.75 and Cartagena \$1.60 per lb. Jalap is firmer at 12c. per lb.

BERGEN, April 25, 8.45 P.M. :—The total catch of cod for the whole of Norway since the beginning of the season now amounts to 34,368,000, against 33,502,000 for the corresponding date of last year, and the yield of steam-refined oil is now 27,736 barrels, against 25,262 barrels at the same date of last year. The fishing at Finnmarken is going on satisfactorily, and the demand is good, to-day's quotation for finest new non-freezing Lofoten cod-liver oil being 70s. per barrel, f.o.b.

ACID, CITRIC.—Very firm at from 1s. 7d. to 1s. 8d. for English, and 1s. 6d. to 1s. 6½d. for foreign.

ANTIMONY.—Japanese crude (black sulphide) on the spot is very firm but unaltered at 70l. per ton, and for March-April 68l. c.i.f. has been paid, and 70l. for near at hand. English regulus is again dearer, at 100l. to 102l. spot. In auction 23 pkgs. of Japanese crude had been sold privately, and for a further 12 bags 65l. to 66l. was accepted. An odd cask of English regulus "P" brand was sold at 95l.

BAYBERRY-BARK is likely to be much dearer shortly, and one holder on the spot has temporarily withdrawn from the market.

BROMIDES.—There is still a difficulty in obtaining supplies from English makers, except in limited quantities only, and a similar situation exists in Germany, where it is said a large demand is giving the market an upward tendency. On the spot a limited quantity of American potassium is offered at 11¼d. per lb. net.

CINCHONA.—At the monthly sale in London on Tuesday the extremely small quantity of 503 packages was offered, comprising 397 packages East Indian, of which 173 sold, and 106 packages of Java, all of which were disposed of. The average unit was unchanged as compared with the previous sale, being ¾d. per lb. A nice parcel of 113 serons of Crown bark offered at the drug auction sold at from 7d. to 8¾d. for broken to good Loxa quill, and for Huanuco from 6½d. to 6¾d. was paid for sound. Flat Calisaya was bought in at 10d.

The following table shows the approximate quantities of bark purchased by the principal buyers :—

	Lb.
The Frankfort and Stuttgart factories ...	34,510
The Imperial Quinine factory ...	19,894
Messrs. Howards & Sons, Ltd. ...	9,590
The American and Italian factories ...	4,000
The Brunswick factory ...	300
Total quantity sold ...	68,294
Bought in ...	56,203
Total quantity offered ...	124,494

The following prices were paid: JAVA Ledgeriana, stem chips 6½d. to 6¾d., branch ditto 4¾d. to 5¼d., root 3¾d. to 6d.; Hybrid, stem chips 4¼d., and branch chips 4¼d. per lb.

EAST INDIAN officinalis, original stem chips and shavings 2¾d. to 4¾d., renewed 4¼d. to 4½d., branch 3d. to 3½d., and root 2¾d. to 4¾d. per lb.

The 6,840 bales and 291 cases of Java bark to be offered at Amsterdam on May 3 weigh 648,547 kilos., and contain a total of 33,665 kilos. of quinine sulphate. The manufacturing-bark contains an average of 5.60 per cent. quinine sulphate; 14 cases of South American bark will also be offered, weighing 515 kilos., and containing 11 kilos. q.s.

COCOA-BUTTER.—The auction to be held at Amsterdam on May 1 will consist of 50 tons Van Houten's, 15 tons de Jong, 5 tons Mignon, and 10 tons Stollwerck.

ELEMI.—The *Minnetonka* has arrived with 21 cases *via* New York: they come to a bare market.

OIL, CASTOR, is dearer. Hull make for prompt and to June delivery is quoted 27l. 5s. for first-pressings and 27l. 15s. for July-December; second-pressings June or July to December 25l. 15s. per ton, ex wharf London. Belgian firsts are quoted 28l. 5s. and seconds 26l. 10s. on the spot.

OIL, COD-LIVER.—Our Bergen correspondent writes on April 24 that the oil-market is a trifle easier owing to better news from the fishing districts, especially that of Finnmarken. The weather has moderated at last, and the fishermen have been able to substantiate the fact that the cod are under the coast of Finnmarken at the usual places. The Lofoten fishing is apparently closing. The exports from Bergen up to date amount to 4,534, against 2,384 last year.

In London, agents' quotations remain much as last week, from 70s. to 72s. 6d., c.i.f., being quoted for finest brands, but buyers are holding off at these prices, as it is thought the advance has come about too quickly, and a set-back in price would not, therefore, be surprising. There appears to be a fair amount of oil moving into consumption, cold weather, no doubt, having stimulated the demand.

A report from Norway, dated April 18, states that the stormy weather has again proved a great hindrance to the

fishing, and the result has been very poor. The following figures represent the catch to date:

<i>Lofoten.</i>			
	Millions Cod.	Steam Ref. Oil.	Liver for other Oils.
April 18, 1906	18.4	16,828 hectol.	2,964 hectol.
April 15, 1905	13.2	11,220 "	1,707 "
April 16, 1904	10.1	2,690 "	673 "
April 13, 1903	12.0	543 "	960 "
April 19, 1902	14.2	9,595 "	2,489 "

<i>The Whole of Norway.</i>			
	Millions	Steam Ref. Oil.	Liver for other Oils.
1906	34.2	31,951 hectol.	8,401 hectol.
1905	31.2	26,875 "	5,959 "
1904	31.6	10,801 "	5,340 "
1903	30.2	2,145 "	4,358 "
1902	32.0	18,770 "	13,092 "

A report from Norway, dated April 23, gives the following figures relating to the catch up to date:

<i>Lofoten.</i>			
	Million. Cod.	Steam Ref. Oil.	Liver for other Oils.
April 23, 1906	18.5	16,192 hectol.	2,995 hectol.
April 22, 1905	13.5	11,493 "	2,239 "
April 23, 1904	11.7	3,124 "	650 "
April 25, 1903	13.3	603 "	1,084 "

<i>The Whole of Norway.</i>			
	Million	Steam Ref. Oil.	Liver for other Oils.
1906	34.9	32,425 hectol.	8,639 hectol.
1905	33.2	29,306 "	6,188 "
1904	36.2	11,950 "	5,703 "
1903	34.3	2,240 "	4,744 "
1902	36.2	20,142 "	15,276 "

A Bergen advice, dated April 18, quotes from 66s. to 70s. per barrel f.r. Hull, stating that the price has risen somewhat, as unfavourable weather has continued at the fishing-places.

OIL, PEPPERMINT.—Quiet but firm, American in tins offering at from 10s. 9d. up to 13s. on the spot, according to brand. H.G.H. is quoted 14s. 9d. to 15s., London terms, but there is little doing; and for Japanese demethylised 4s. 9d. spot is still quoted for Kobayashi.

OILS, FIXED.—*Turpentine* closes at 46s. for American on the spot, and last week's quotations for *Petroleum* still hold good. *Linseed* oil is firmer at 22s. in barrels, and 21s. 9d. in pipes on the spot. *Rape* is firmer at 25s. 6d. for refined, and 24s. 6d. for ordinary brown on the spot. *Lagos Palm* oil is 6d. easier at 30s. per cwt. spot. Crude *Cottonseed* is 3d. dearer at 20s. 6d., but refined is unchanged at from 21s. 6d. to 23s. per cwt. *Coco-nut* oil is dearer for shipment. Ceylon on the spot is quoted 29l., and Cochin 35l. per ton.

OPUM is steady, with small sales of Smyrna druggists' at from 7s. 9d. to 8s., and for manufacturing Tokats of low quality up to 8s. has been paid in retail lots. Persian is still obtainable at the recently reduced rates. Advices from Constantinople point to a firmer market there, owing to the small stocks.

SMYRNA, April 21.—The sales this week amount to 27 cases as follows: For England nine cases common talequale and six cases selected manufacturing; for America ten cases current talequale; and for the Continent two cases rich extra Karahissar. Sellers continue very firm for all rich manufacturing, but common current and low-testing material can be easily obtained at 5s. 9d. to 7s. as to quality, strength, and buying conditions. The arrivals in Smyrna to date amount to 1,492 cases, against 4,791 at same period last year.

QUININE.—There is no market so far as speculation is concerned, and the nominal quotation for good brands of German sulphate is unaltered at 8½d. per oz. from second-hands. The makers' price is 9d.

SHELLAC has been quiet, moderate sales on the spot including TN orange on a basis of 190s. to 192s. for fair to good free. Good Buttons have been sold up to 185s. Futures have been almost inactive, the sales including May delivery at 191s. and August at 191s., but on Wednesday these prices were nominal.

SPICES.—At auction Jamaica *Ginger* of old crop was lower, some 300 packages selling without reserve at from 55s. 6d. to 58s. 6d. for fair common, and 52s. to 55s. for common. New crop was steady, fair washed selling at 62s. to 68s. and small washed 57s. A few bold cut Cochin sold at 80s., fair Calicut rough was bought in at 32s., and good washed rough Cochin at 35s. *Pepper* sold without reserve at 5½d. for dusty greyish Singapore; Alleppy was bought in at 5½d.

to 5½d. for fair, 5½d. to 5½d. for good Tellicherry, and 5½d. for fair Wynaad. Privately the market for Singapore is steady, but quiet, with sellers of January-March shipment at 5½d. *White pepper* is easier: fine bold Singapore in cases sold at auction at 9d. to 9½d. and fair at 7d. Privately fair Singapore is quoted on the spot at 7d. and Penang at 6½d., and to arrive 7d., c.i.f., has been paid for ten tons Singapore for May-June. *Chillies* partly sold without reserve at 23s. 6d. for ordinary dark East Coast African, and fine Japan were bought in at 45s. East Indian *Capsicums* were bought in at 45s. for stalky red. *Nutmegs* were easier and *Mace* was practically all bought in. Zanzibar *Cloves* at auction were quiet, 225 bales being offered, of which a few sold at 6½d. for barely fair; Amboyna were taken out at 9½d. Privately the delivery market had been quiet up to Wednesday, on which day some 800 bales sold for delivery including March-May at 6½d. to 6½d., and June-August at 6½d. To-day market closes firmer, 6½d. being asked for June-August.

SULPHUR.—Advices from Sicily state that refined and ground sulphur has been in good demand for the spring requirements for vineyards, prices having remained steady and unchanged. The market for crude has been quiet, and "outsiders" prices have been constantly declining. Their stocks, especially best unmixed seconds and best thirds, are very small. The Anglo-Sicilian Sulphur Co.'s prices are much higher than outsiders. The stocks in Sicily at the end of March amounted to 427,753 tons, against 339,930 tons in 1905. In London flowers are quoted 6l. 5s., and roll 6l. per ton.

An advice from Messina, dated March 31, states that the negotiations between the A.S. Co. and Mr. Frasch, of the Louisiana Sulphur Co., although prolonged, have not resulted in a definite understanding as to the future. The Italian Government has decided to send two engineers to the U.S.A. to report on the Louisiana mines, and may probably await their return before presenting the new Bill, known as the "Consortio Obbligatorio," to Parliament. So far nothing has transpired as to what will become of the stock of the A.S. Co. It is thought that if the monopoly had not raised prices so inconsiderately the stock would probably have never reached its present proportions, or American competition called into existence.

London Drug-auctions.

The following table shows the quantity of drugs offered and sold at the London auction:

Offered		Sold		Offered		Sold	
Agar-agar.....	30	...	0	Cochineal.....	17	...	0
Albumen.....	5	...	0	Colocynth.....	42	...	19
Aloes—				Croton-seed.....	14	...	0
Cape.....	45	...	37	Cubels.....	21	...	21
Curaçao.....	80	...	26	Cuttle-bone.....	131	...	8
Ambergris.....	3	...	0	Divi-divi.....	7	...	7
Ammoniacum.....	7	...	1	Dragon's-blood.....	19	...	3
Aniseed.....	66	...	*10	Egg pulp (frozen).....	2	...	0
Anatto-seed.....	49	...	24	Elaterium.....	1	...	*1
Antimony—				Elemi (so-called).....	19	...	0
crude.....	38	...	35	Ergot.....	40	...	0
regulus.....	1	...	1	Galls (Pers.).....	7	...	7
Araroba.....	29	...	0	Gamboge.....	19	...	2
Arecia.....	30	...	*10	Gentian.....	2	...	2
Balsam—				Gum arabic.....	45	...	12
Copaiba.....	1	...	0	Honey—			
Peru.....	4	...	0	Californian.....	124	...	0
Tolu.....	10	...	0	Jamaica.....	214	...	149
Benzoin—				New Zealand.....	52	...	0
Palembang.....	44	...	36	Lequiba-nuts.....	6	...	0
Siam.....	10	...	2	Insect flowers.....	20	...	0
Sumatra.....	236	...	80	Ipecacuanha—			
Bird lime (Jap.).....	12	...	0	Cartagena.....	5	...	0
Buchu.....	72	...	27	Johore.....	1	...	0
Calumba.....	185	...	161	Rio (Matto Grosso).....	27	...	12
Camphor—				Rio (Minas).....	7	...	0
China crude.....	15	...	0	Kamala.....	1	...	0
Jap. ref.....	83	...	0	Kola.....	13	...	13
Cannabis indica.....	20	...	0	Lime-juice (raw).....	1	...	0
Cantharides (Russ).....	3	...	0	Loofahs.....	7	...	0
Cardamoms.....	570	...	451	Mastic.....	12	...	0
Cascara sagrada.....	192	...	*25	Menthol.....	15	...	0
Cascarilla.....	45	...	2	Musk (Cab.).....	2	...	0
Cashew-nuts.....	12	...	0	Musk-seed.....	1	...	0
Cassia fistula.....	7	...	7	Myrrh.....	71	...	1
Chiretta.....	8	...	*8	Oil—			
Cinchona.....	232	...	113	aniseed.....	20	...	0
Civet.....	21	...	0	camphor.....	20	...	10
Coca-leaves.....	124	...	34	cananga.....	10	...	0

	Offered	Sold		Offered	Sold
Oil—			Sarsaparilla—		
einnamon-leaf ...	5	0	grey.....	37	33
elove	2	0	native.....	25	25
eucalyptus	26	26	Honduras	12	0
lemongrass	54	0	Scammonium	10	0
ncroli	1	0	Senega	12	0
orange (W.I.) ..	4	0	Senna		
patchouli	24	24	Alex.	37	0
peppermint	30	0	Timnevelly	183	155
sandalwood	1	0	Squill	7	0
wood	19	0	Soy (Chin)	16	1
Olibanum	21	0	Sticklac	49	*7
Orange-peel	78	21	Strophanthus	2	0
Orris	176	112	Styrax	1	0
Patchouli	136	0	Tamarinds (E.I.) ..	3	0
Pistachio	5	0	Tamarinds (W.I.) ..	77	49
Plumbago	159	0	Tonka beans.....	4	0
Puteha-leaves ..	10	0	Turmeric	120	*20
Quillaia	43	0	Wax (bees')—		
Rhatany	38	0	Aden	13	1
Rhubarb—			Australian	6	6
Austrian	7	0	East Indian	74	*26
China	63	8	Jamaica	6	5
Sandarac	76	0	Madagascar	15	15
Scablae	17	17	Zanzibar	13	3
Scammony-root ..	90	0	Wax (Japanese) ..	112	10

* Sold privately.

"Without Reserve" Drugs.

At the drug-auction on Thursday, Messrs. Garrard & Son had catalogued 27 bags of orris root without reserve in three lots. These having been sold, five further lots (50 packages), numbered A to E, were then "written in" and sold at reduced prices. When the next broker (Mr. A. Devitt) mounted the rostrum, Mr. R. K. Harvey, under the impression that Mr. Devitt was still President of the London Produce Brokers' Association, asked for his ruling on the subject. He thought it was hard lines on the buyer that he should be allowed to buy several lots without reserve, under the impression that there was no more to be had. It was only fair that the total amount for sale should be stated on the catalogue. Mr. Tapscott, who sold the orris in question, mounting the rostrum, said that "writing in" lots had frequently been done before. Mr. Harvey: Not "without reserve." Mr. Lescher agreed. Mr. Tapscott said that he was following precedent, and anyhow it was rather late to raise the point. Mr. Boughton (Hicks Bros.) said that, as the buyer of the lots in question, the case would be met if the lots were re-offered. This Mr. Tapscott immediately did, but he accepted 6*l.* to 1*s.* less on the printed lots, while only one additional lot was "written in." This met with the entire approval of the "Room," but Mr. Urwick protested against Mr. Tapscott's generous conduct being taken as a precedent, and claimed that the seller had the right to "write in" further lots. With this Mr. Devitt disagreed, and characterised such proceedings in the case of "without reserve" lots as sharp practice, and added that it was not desirable to create any false impression. The incident then closed.

AGAR-AGAR.—Barely fair Japanese strips were held at 1*s.* 4*d.* per lb., and cuttings at 9½*d.*

ALOES.—Cape sold at irregular but firmer prices, 20 cases realising 26*s.* 6*d.* to 27*s.* 6*d.* for fair to good bright hard firsts, 23*s.* to 24*s.* 6*d.* for slightly dull, and 21*s.* 6*d.* for common. A parcel of 67 boxes Curaçao, said to have been in stock over eleven years, partly sold at 58*s.* to 59*s.* 6*d.* for fine pale liver, and 55*s.* for good; 60*s.* was wanted for the finest lot; common dull and sweepings realised 26*s.* per cwt.

AMMONIACUM.—A case of partly blocky yellow tear sold at 55*s.*, and for 6 cases good pale loose almonds the buying-in price was 75*s.*

ANISEED.—Fair Russian had been sold privately at 25*s.* 6*d.* per cwt.

ANNATIO-SEED tending lower; seven bags good Madras sold at 4½*d.*; common dry can be had at 3*d.*

ARAROA.—No bid was made, although offered without reserve.

ARECA.—Ceylon was held at 22*s.* 6*d.* per cwt., at which sales have been made privately.

BALSAM TOLU was held at 10½*d.* per .. for good hard in 16-lb. tins.

BENZOL.—Steady. Good fair almondy Sumatra seconds sold at from 8*l.* 7*s.* 6*d.* to 8*l.* 12*s.* 6*d.*; fair seconds, 7*l.*; ordinary seconds, partly false packed, 5*l.* 10*s.* to 5*l.* 15*s.* to

6*l.*; and common false packed thirds without reserve at from 5*l.* to 5*l.* 2*s.* 6*d.* Fair glassy Palembang seconds in tins sold steadily at 42*s.* 6*d.* to 45*s.*, the latter price being subject; and of Siam two cases of brown dust in hard block sold at 90*s.* per cwt., and for small almonds in shivery block 12*l.* 10*s.* was wanted.

BIRD-LIME.—Japanese was bought in at 6½*d.* per lb.

BUCHU.—Firm and in good demand, some 30 bales of fair to good green round selling at from 7½*d.* to 7¾*d.* per lb., and yellowish at 5½*d.*

CALUMBA.—A parcel of 100 bags fair washed yellowish sorts sold at from 18*s.* 6*d.* to 20*s.* per cwt., and for 61 bags dull sorts 13*s.* was paid.

CAMPOR.—Quiet. Fourteen cases of crude were bought in at 370*s.* per cwt., and no refined was disposed of; to suggestions of 3*s.* 11*d.* for 1-oz. tablets no response was made. Privately 3*s.* 11½*d.* has been paid for 1-oz. size.

CARDAMOMS were in good demand at irregular rates; fine pods were barely steady, medium and bold firm, but for the lower qualities (especially splits and grades below 1*s.*) prices advanced 1*d.* to 2*d.* per lb. *Seed* was also dearer. The following prices were paid: Extra fine bold pale selected, 3*s.* 7*d.*; extra bold pale (few warty), 2*s.* 7*d.*; fine pale round, 2*s.* 3*d.* to 2*s.* 4*d.*; good bold pale, 1*s.* 10*d.* to 2*s.* 1*d.*; bold round pale, 1*s.* 8*d.* to 1*s.* 9*d.*; small round, 1*s.* 1*d.*; good bold palish to pale, 1*s.* 6*d.* to 1*s.* 8*d.*; good medium palish to pale, 1*s.* 3*d.* to 1*s.* 5*d.*; small good pale, 1*s.* to 1*s.* 1*d.*; extra small pale, 10½*d.* to 11*d.*; small splits, 10*d.*; good pickings, 1*s.* to 1*s.* 2*d.*; fair pickings, 11*d.*; brown and split, 9*d.* to 11*d.*; Mangalore, good bold, 2*s.* 4*d.*; medium, 1*s.* 9*d.*; small, 1*s.* 1*d.* Decorticated *Seed* was 1*d.* dearer at 1*s.* 4*d.* to 1*s.* 5*d.*

CASCARA SAGRADA.—Holders are now asking 30*s.* per cwt. for 1903 crop, which is firmer, but business is difficult to effect at the moment. The *Port Stanley* from San Francisco has arrived with 2,305 sacks and 902 bags.

CASCARILLA.—Fair broken quill, part silvery, was held at 70*s.*, and for 2 barrels of siftings 35*s.* was paid.

CASSIA FISTULA.—Seven bags of new Dominican sold at 18*s.* for long partly rattly pod.

CHIRETTA.—The parcel offered had been sold privately.

CIVET.—A pile of 21 horns was held at 4*s.* 6*d.* per oz., which price has been paid privately.

COCA-LEAVES.—Easier. A parcel of 21 cases and 3 bags of Ceylon (Huanuco character) sold at from 11*d.* to 1*s.* for fair to good green leaves. Two cases sea-damaged realised 8*d.*, subject. A parcel of 37 cases Ceylon partly sold at 7*d.* to 7½*d.* for thin green Truxillo character.

At Amsterdam on May 3, 61 packages of Java coca-leaves, weighing 3,465 kilos., and five packages Ceylon, weighing 160 kilos., will be offered at the conclusion of the bark sale.

COLOCYNTH.—Easier. Good pale Turkey apple was offered at 1*s.* 5*d.* per lb., and broken apple at 11*d.*; while 12 cases fair pale Turkey sold without reserve at 1*s.* 1*d.* to 1*s.* 2*d.*; ten cases Spanish apple were held at 10*d.*, at which small sales have been made privately and six bales of Turkey pulp sold at 1*s.* 10*d.* per lb.

The exports from Jaffa during 1905 amounted to 52,500 lb. (3,370*l.*), against 57,000 lb. (3,650*l.*) in 1904, and an average of 47,952 lb. (2,872*l.*) for 1901-05.

CUEEBS.—For 21 bags of sifted brown shrivelled berries, 40*s.* was paid.

DRAGON'S-BLOOD.—Easier; a small sale of fair bright seedy lump selling at 8*l.* 7*s.* 6*d.* Good was held at 10*l.* per cwt. Two cases of Zanzibar drop sold at 65*s.* per cwt.

ERGOT.—Small grey Russian was limited at 1*s.* per lb. for 7 bags, and for a further lot of 17 bags 11*d.* was refused; for good Spanish 1*s.* 10*d.* was asked.

GALLS.—Small sales of Persian blue were made at from 82*s.* 6*d.* to 5*l.* 2*s.* 6*d.*, without reserve, according to quality.

GAMBAGE. rather lower, a case of good, unsorted, slightly blocky Siam pipe realising 19*l.* per cwt., and a further case of very block Siam damp sorts sold at 18*l.* Hand-picked was bought in at 20*l.*

GENTIAN.—Sea-damaged French sold at 16*s.* per cwt., subject. Privately the market is firmer, holders asking 16*s.*, f.o.b. Marseilles, for ordinary quality.

HONEY.—Jamaica sold at firm prices, especially in the case of fine, but Californian and Australian were neglected. Good clear amber liquid Jamaica, in cases, sold at 27s.; fine set white, in casks, at 26s. 6d.; pale set, in half-barrels, at 25s.; brownish set, in barrels, 20s. 6d. to 21s. 6d., darker ditto at 18s. 6d. to 19s.; and dull brown liquid to set, from 17s. to 21s. per cwt. Seven casks St. Lucia sold at 18s. for rather dark. For good mixed colours Californian 32s. was wanted.

IPÊCACUANHA.—Rio was about 1d. easier, from 7s. to 7s. 2d. per lb. being paid for about a dozen bales as to quality. A bale of red Rio sold without reserve at 6s. 7d. per lb. Minas was held at 7s. to 7s. 3d., Johore at 7s. 6d., and Cartagena at 6s. 6d.; a bid of 6s. 2d. is to be submitted for dusty grey of the latter. Privately small sales of Rio have been made at 7s. 6d.

KOLA.—Three odd packages West Indian dried sold at from 2½d. to 4½d., the latter price being paid for fair Grenada halves. Ten barrels of fair West Indian realised 3½d.

MENTHOL.—Quiet; 8s. 9d. spot will readily buy Kobayashi crystals.

MYRRH.—Picked is held for 7l., at which sales have been made. For a bag of siftings 70s. was paid.

OIL, CAMPHOR. containing 25 per cent. safrol sold at 35s. per cwt., subject to buyer's approval.

OIL, CLOVE. containing 83 to 85 per cent. eugenol is quoted 5s. 7d. per lb.

OIL, EUCALYPTUS.—Sixteen cases of B.P. oil and 5 cases (58 to 69 per cent. cineol) had been sold privately, while for 5 cases containing 80-per-cent. cineol 1s. 1d. per lb. was paid.

OIL, LEMONGRASS. is offered at 8¼d. per cz. for oil containing 72 to 73 per cent. citral.

OIL, PATCHOULI.—Lower. Twenty-four cases of Fisher's brand, special quality, sold without reserve at from 8½d. to 9d. per oz.

ORANGE-PEEL.—Several sales had been made privately, and for 18 bags of coarse Maltese ringlets 4½d. per lb., subject, was paid.

ORRIS-ROOT.—Thirty-seven bags of fair small pale Florentine sorts, offered without reserve, sold at from 21s. to 22s. 6d. Twenty-seven bags were originally catalogued and five lots of 10 bags each were written in, and, at first, the whole was sold at from 20s. to 23s.; but on being re-offered, as the result of Mr. Harvey's protest referred to elsewhere, 6d. to 1s. less was realised on the printed lots, and the original price of 22s. 6d. on the 10 bags again written in. From another catalogue 20 bags of dull Florentine sorts sold at 20s. (no discount or allowances), and 7 casks cuttings realised 16s., without reserve.

QUILLAIA was offered at 17l. 10s. per cwt. without finding buyers.

RHUBARB.—Quiet. A case of medium to bold flat Shensi (practically pickings) with three-quarters fair pinky fracture sold at 1s. 9d., and for a case of Canton trimming root slightly stalky, with three-quarters good pinky break, 2s. 8d. per lb., subject, was paid. A case of Shensi round trimming root with three-quarters pale pinky fracture sold without reserve at 2s. 4d. For 4 cases of medium to bold orange-coated Shensi with half-pinky and half-grey and dark fracture 1s. 8d. to 1s. 9d. was paid, without reserve. Medium to bold flat High-dried is still held for 1s. 3d. per lb., and bold round orange-coated Shensi with three-quarters fair pinky break is held at 2s. 5d.

SARSAPARILLA.—There was a good demand for grey Jamaica, which sold at about steady prices, from 2s. 1d. to 2s. 2d. being paid, according to quality. Native red was also in demand, 23 bales being disposed of at from 10½d. to 1s. 0½d. per lb. A shipment of 35 bales Lima-Jamaica is close at hand, and will probably be offered at the next sale.

SCABLAC.—Fair to good native Madras sold at from 6l. to 6l. 2s. 6d., and for one case fine bright pale 9l. was paid.

SCAMMONY-ROOT was limited at 15s. per cwt.

SENNA met with active competition at firm prices. Common to ordinary brownish and specky Tinnevely leaf sold at from ¾d. to 1d., medium greenish 1¼d. to 1½d., and

fair to good greenish 2d. to 2½d. Pods, 1¼d. Good pale Alexandrian pods were held at 8½d., dark pods at 6½d., and half-leaf at 4½d. per lb., a bid of 1d. less being refused for the latter.

STICKLAC.—Ordinary free Rangoon was held at 6l. per cwt., and woody 55s. to 80s.

TAMARINDS.—Lower; 49 barrels of good Antigua of new crop sold at from 14s. to 14s. 6d. per cwt. in bond, and for 12 barrels low stony Antigua and Barbados without reserve no bid was made.

WAX, BEES'.—Jamaica was about 5s. per cwt. dearer, the little that was offered being sold at 8l. per cwt. all round. Six bags of fair mixed Australian sold at 7l., and for 18 packages of Madagascar 7l. to 7l. 5s. was paid for yellow and brown. A case of Zanzibar realised 6l. 15s., and 2 bags dark drossy 6l. 5s. per cwt.; 26 cases Bombay had been sold privately, and for a case of yellow Aden 6l. 15s. was paid.

WAX, JAPAN.—Quiet at 56s. per cwt., spot.

Heavy Chemicals.

There is not much change in the general condition of the heavy-chemical market, though, if anything, there is a slight increase in all-round demand on both home and export account, and as a consequence values mostly rule on the steady side; and this applies to both main and miscellaneous products.

BARIUM-PRODUCTS.—The general demand in this branch is well maintained, and this, together with the fact that the mineral carbonate, or witherite, is in none too abundant supply, keeps prices very firm and with continued tendency towards advancement. Chloride of barium ordinary refined crystals, 6l. 5s. to 7l. 5s. per ton in large casks, and 6l. 10s. to 7l. per ton in bags. Blanc Fixe, pure precipitated sulphate of barium in paste-form, is moving well at from 6l. 10s. to 7l. per ton in 7-8 cwt. casks. The pure Blanc Fixe, dried and in powder form, is also in increased demand at 8l. 15s. to 9l. 15s. per ton in 6-7 cwt. casks. Mineral sulphate of barytes continues in about average request at unaltered rates of 40s. to 100s. per ton, according to quality, quantity, and package. Sulphide of barium, crude calcined, 70-75 per cent., 4l. 5s. to 4l. 15s. per ton in 7-8 cwt. casks. Hydrate of barium is now in somewhat better supply, but still is very firm. Crystals in 6-7 cwt. casks, 13l. to 14l. per ton. Fused concentrated, 56-60 per cent. BaO, 13l. 10s. to 15l. per ton in drums. The latter quality in crushed state and in special drums 30s. per ton extra. Nitrate of barium is very steady, crystals at 18l. to 18l. 10s. per ton, and powdered at 18l. 5s. to 18l. 15s.

LEAD COMPOUNDS are very firm, and white acetate of lead is dearer at 27l. 5s. per ton, less 2½ per cent. Glasgow. Brown acetate of lead 22l. to 22l. 5s. per ton, and nitrate of lead 27l. to 27l. 5s. per ton.

German Drug-market.

Hamburg, April 24.

Business in general is quiet, and our drug-market shows no exception to the rule.

AGAR-AGAR is tending firmer, current quality being quoted 235m., and prime 300m., per 100 kilos.

ANTIMONY is very firm at 135m. to 140m. per 100 kilos.

CAMPHOR is very firm and scarce, 900m. per 100 kilos. being asked for refined in bells.

CANTHARIDES are quiet at 9½m. per kilo, for Russian.

CASCARA SAGRADA.—There is little doing, in spite of the earthquake in California; the price of 55m. per 100 kilos. is still unchanged.

CITRIC ACID is very firm, and dearer at 310m. per 100 kilos.

CONDURANGO is quoted 62½m. per 100 kilos.

CUMIN SEED.—Malta is quoted 66m. and Mogador 60m. per 100 kilos.

ERGOT is dull and lower at 200m. per 100 kilos.

IPÊCACUANHA.—Rio is steady at 16m. per kilo, and Cartagena 15m.

LYCOPodium is unchanged at 400m. to 410m. per 100 kilos.

MENTHOL is quoted 18½m. to 18½m. per kilo.

SENEGA is quiet at 550m. per 100 kilos.

STAR-ANISEED is firmer at 145m. per 100 kilos.

WORMSEED is firm at 137m. per 100 kilos.

OILS (FIXED).—Cod-liver oil is firm and dearer at 70m. per barrel for non-congealing oil. Castor oil is very firm at 55m. per 100 kilos. for first pressing in barrels. Chinese wood oil is steady on the spot at 67m. per 100 kilos., and forward 62m. per 100 kilos. in barrels. Palm kernel is advancing; 55m. per 100 kilos. is quoted.

OILS (ESSENTIAL).—Peppermint H.G.H. is firm, 14½m. per lb. being asked, and for Japanese dementholised 10½m. per kilo. is quoted. Clove oil is firm at 8m. per kilo., and star-aniseed oil is quoted 12½m. per kilo.

London Chamber of Commerce.

CHEMICAL-TRADE SECTION.

A MEETING of this section was held at Oxford Court, Cannon Street, London, E.C., on Monday afternoon, April 23, at half-past two, Mr. John C. Umney presiding. Among others present were Messrs. T. Bennett (Sir J. B. Lawes & Co.), W. L. Corry (Corry & Co., Ltd.), T. G. Dobbs, T. Elborough (Lawes Chemical Manure Co.), C. J. Gilbert (W. Cooper & Nephew), Ralph K. Harvey (Barron, Harveys & Co.), C. A. Hill (Davy Hill & Hodgkinson, Ltd.), David Howard, D. Lloyd Howard (Vice-Chairman) (Howards & Sons, Ltd.), D. H. Jackson, F. H. Lescher (Evans Sons Lescher & Webb, Ltd.), Hugo Lorenz, Peter MacEwan, E. J. Millard (C. J. Hewlett & Son), T. Pierre Morson (T. Morson & Son), G. H. Richards (XL-All Insecticide), John R. South (Steadman & Co.), H. Ayscough Thompson (Willows, Francis, Butler & Thompson, Ltd.), T. L. Thomson (L. Thomson & Son), T. Tyrer (T. Tyrer & Co., Ltd.), W. G. Whiffen, T. Whiffen, T. Woodfine, T. W. Worden (Burt, Boulton & Haywood, Ltd.), R. C. Wren (Potter & Clarke), and John Wylde (T. Keating). After the minutes had been approved, the Chairman reported that he and Mr. Tyrer had drafted a letter to the Chancellor of the Exchequer in regard to

UNTAXED ALCOHOL FOR INDUSTRIAL PURPOSES,

and they had had an acknowledgment of this from the Chancellor's secretary, which stated that the subject was receiving careful consideration, and a statement would be made in due course. Mr. Tyrer supplemented this by explaining that two of the opponents of the Revenue Bill last Session are now in the Ministry, and he had every hope that other opponents have seen the error of their ways. He had been in communication with thirty or forty of them, and he had laid all the facts he had ascertained before the Chancellor in a supplementary letter. Further, four firms who are the largest users of alcohol have, within the past month, been in communication with the Chancellor directly, and have informed him that great relief would be afforded to their industries by carrying out the recommendations of the Select Committee. Mr. Tyrer also referred to the Bill on similar lines which is now before the United States Congress.

The Chairman then reported the formation of the Proprietary Articles Sub-section; and Mr. Musgrave, Assistant-Secretary, gave particulars of the modifications of the Rules and Orders under the Trade-marks Act, 1906.

POISONS AND PHARMACY BILL.

The Chairman said the express object of the meeting was to consider this Bill, Clauses 2 and 6 of which are the outcome of the inquiry and report of the Departmental Committee on Poisons, and those which chiefly concerned the Section. Undoubtedly, said Mr. Umney, the Bill constitutes a serious change in the principle upon which poisons are handled in a retail way, in so far as, up to the present, retailers have had to prove their competence in examination conducted by the Pharmaceutical Society, and the Bill proposes that other persons should be licensed by local authorities to sell poisons without examination by the Pharmaceutical Society. The meeting had been called on the suggestion of Mr. Gilbert, of Messrs. Cooper & Nephews, and the Chairman asked him to favour the meeting with his views.

Mr. Gilbert said he did not think it was necessary that he should go into the policy of the sale of certain poisons by unregistered persons, as that was threshed out by the Select Committee, which had come to definite recommendations that are the basis of the Government Bill. The Bill, in his opinion, is a compromise. The Pharmaceutical Council has certain views on the subject, and the Privy Council holds other views; indeed, he went so far as to say that the Privy Council holds very strong views, perhaps stronger than are justified by circumstances. The only question that he wished to submit was the desirability of having the Bill extended to Ireland. It was the original intention that that should be done, but an amendment had been introduced, with the approval of Lord Crewe, excluding Ireland from its provisions. He

objected to this, and in doing so explained that his sympathies were with qualified persons, for his firm's policy is to have their article in the hands of registered people, and they tried to divert the sale of it exclusively into their hands. They had been unable to achieve this in Ireland, so that at the present time there are more unregistered than registered traders in Ireland who handle Cooper's sheep-dip. That condition arose, he asserted, solely owing to the fact that they could not get registered persons in Ireland to handle it in all the districts in which it is required. Dr. Walsh and Mr. Wells had come to London to see Lord Crewe, and had produced to him a map showing the localities in Ireland in which there are registered chemists. That was their theory, but, he said, dealing with the facts, the map included doctors, who did not want to do this sort of trade. As an example of the way in which some Irish chemists do business, Mr. Gilbert mentioned that his firm sent to one a consignment of the dip on sale or return. Twelve months later they called upon the chemist and found that he had sold the stuff, but could not pay for it, and the same happened a year later. He proceeded to say that he thinks the Pharmaceutical Council in England does not seriously contest the principle underlying the Bill, but he mentioned that there are whole tracts of sheep-country in Ireland where chemists cannot be found. England and Wales are covered with chemists, and his firm have no difficulty in selling their goods in every part of these countries, so that between 95 and 100 per cent. of their agents are registered persons. But in Ireland 60 per cent. of the agents are unregistered. He argued, therefore, that there is real need for the provisions of the Bill being extended to Ireland. He had observed that since the deputation had returned they had held a rather jubilant meeting, the taste of which he questioned, and had passed a resolution to have certain full penalties imposed under the Act respecting the sale of such poisons as these to be enforced; and he submitted that, in view of what the Pharmaceutical Society in Ireland is doing, it is time to get the provisions of the Bill extended to that country.

Mr. Whiffen was then asked by the Chairman to speak, but he said he would prefer to reserve his remarks. The Chairman thereupon called upon

Mr. MacEwan, who said, in reference to Mr. Gilbert's remarks respecting the deputation from Ireland and the application of the Bill to that country, that he had personal knowledge of the circumstances. The deputation had convinced Lord Crewe of the rights of their case by showing him that the Departmental Committee had not called witnesses from Ireland, nor had the Irish Society been represented in any way. The case was therefore not made out as regards Ireland. Moreover, the deputation had elicited that the Bill without the Irish clause was one for modifying the terms of the 1868 Act, and if Clause 7 were retained, so that the Bill applied to Ireland, it would create considerable confusion in the administration of the Irish law. The deputation had suggested that if these provisions are required for Ireland a separate Bill would be better. He further mentioned that the map submitted by the deputation showed localities in which, according to the registers, pharmaceutical chemists, chemists and druggists, and registered druggists, are in business: it did not, as Mr. Gilbert asserted, include doctors unless these also happened to be on the chemists' registers.

Mr. Millard was surprised that Mr. Gilbert's party had not got into communication with the Irish Parliamentary representatives if their case was such a strong one as he had indicated. At all events, he could not understand why Mr. Gilbert did not extend to Ireland the same method of business as he had found so successful in England.

Mr. David Howard said it was rather difficult for the Chamber to deal with legislation of this kind. There might be a difference of opinion as to whether it is safe or not to sell poisons in this way—that is, through retailers who are not qualified by examination—but there can be none as to the danger of unqualified persons breaking bulk of poisons. (Hear, hear.) As to the sale of acids, he confessed that on the whole it would be better to confine their sale to pharmacists; but industrial requirements prevent this, and he thought that Clause 6 is about as far as they could go compatibly with the convenience of the trade.

The Chairman here pointed out that there is one serious

blot on Clause 6—namely, that it would make the word "poison" too cheap, as it would apply the word to articles which are not scheduled poisons. He thought that instead of labelling them in that way they should be labelled with such words as "Corrosive," "Dangerous," "Not to be taken," or in some other manner that would show they are to be guarded with care.

Mr. Howard then suggested that it would be well to have a list of such articles drawn up, and Mr. Millard remarked that it was intended to have all these scheduled.

Mr. W. G. Whiffen expressed his sympathy with what Mr. Howard had said, and stated that breaking bulk was strictly prohibited by the Departmental Committee's recommendations, and the principle had been incorporated in the Bill. The Pharmaceutical Society had his sympathy, and he was desirous that the interests of chemists should be safeguarded; but those whom he represented took a different view of agricultural and horticultural poisons, in so far as they held that their sale should be facilitated yet safeguarded. Clause 2 he considered reasonable. He had not such intimate knowledge of Ireland as Mr. Gilbert, but supported his contention. His experience of Great Britain in respect to horticultural poisons was that it is difficult to get a supply of these without the agency of a florist. He could see no danger to the public in the Bill so long as the poisons are sold in the original packages without breaking bulk. As to the schedule he thought it a just one.

Mr. Dobbs said the principal argument brought against the Bill is that the safety of the public requires a qualified vendor. That, he said, is a bogey, because manufacturers do not allow the packages to be broken at all. He was glad to hear from Mr. Gilbert of the difficulty of getting poisons into the hands of persons who want them in Ireland, for that was a corroboration of his own experience. The 1868 Act was required for controlling the sale of medicinal and therapeutic poisons, and the conditions are not applicable to agricultural and horticultural poisons. The conditions could not be followed out in the complete manner which the law requires. He illustrated this by mentioning the sale of Cooper's dip and weed-killers in country towns where the farmer goes into the chemist's shop and orders them to be sent, say, to the Crown Hotel, where they are put into the farmer's cart with food and other articles. This, he argued, shows that the danger in the distribution of poisons does not arise until they get into the hands of the consumer. He also argued that the nurseryman is a competent retailer of such articles, because he knows when the purchaser is a gardener, as he also buys seeds, therefore he is the best man for selling such poisons. Mr. Dobbs next referred to the proposed regulations, quoting especially Nos. 2, 13, 14, and 15, and argued that these will be a sufficient guide to local authorities in granting licences. He reminded the meeting that it was not a Chamber of Chemists, but a Chamber of Commerce, and must act in this matter from the broad commercial point of view rather than from the chemists'. He submitted that nurserymen and seedsmen are the persons who introduced horticultural articles, and chemists say they will not handle them. He objected to Sub-clause 2 of Clause 2 and stated that at present there is a great uproar in Ireland in wool-staplers' districts against the Pharmaceutical Society's action respecting the sale of agricultural poisons by unqualified persons.

The Chairman asked Mr. Dobbs if he could define what is "a person fit to be entrusted with the sale of poisonous substances" under Clause 2.

Mr. Dobbs replied that the local authorities will know who the applicants are, and gave an instance—namely, Wrench & Co., a provincial firm who are known to be perfectly respectable seedsmen; the local authorities would know that they are such persons as are contemplated by the Bill. Mr. Dobbs further added that the provisions will not apply to London and other large cities, such as Birmingham. They will only apply to small country places where there are no chemists.

The Chairman: Perhaps that will get over Mr. Gilbert's difficulty about getting the money for his goods. (Laughter.)

Mr. Dobbs further referred to the competence of local authorities, and endorsed all that Mr. Gilbert had said about the difficulty of getting agents in Ireland.

The Chairman here remarked upon the fact that Ireland has been expressly excluded from the Bill by Lord Crewe

as no evidence was given from Ireland to the Departmental Committee.

Mr. Gilbert said that Lord Crewe had reserved the right to restore the Irish clause in the House of Commons.

The Chairman: Yes, if inquiries are made and the necessity for it appears.

Mr. Gilbert, continuing, remarked that he is not an anti-pharmacist, and all his sympathies are with the chemists; but there are certain places where farmers cannot get these commodities, and it was to meet this that he supported the provisions of Clause 2. He considered there would be no difficulty in making the Bill apply to Ireland, and if there is one country to which it should not apply it is England. In fact, he did not want it, he said, to apply to England. As to the persons who should be licensed, he thought that the local authorities should obtain all possible powers so long as the licensee is surrounded by every reasonable restriction.

The Chairman had asked Mr. Gilbert to submit some definite resolution, and Mr. Gilbert thought that one to the effect "That in the opinion of this Chamber the Poisons and Pharmacy Bill should be made to extend to Ireland" would meet the case. But the Chairman thought that that would not have the unanimous approval of the meeting, and it would be better to have one embodying Mr. Gilbert's statements more fully, such as

That this Chamber, while feeling that there is little or no necessity for the provisions of Clause 2 in England and Wales, considers that it is desirable that it should be extended to Ireland as well as Scotland.

Mr. Gilbert hesitated to put such a motion, and was proceeding to make some remarks as to the necessity for such a dip as Cooper's for the treatment of scab, when Mr. Corry objected, saying that it should not be assumed that only arsenical preparations are good for scab. He could produce plenty of evidence to the contrary from forty years' experience in the manufacture of sheep-dip, and stated that his own article had been used by the largest flockmasters without injury and at a cheap rate. Mr. Gilbert replied that you can't kill insects with anything except poison, and that was what the Bill recognised. Conversation about the motion then proceeded in a rather animated style. Mr. Dobbs intervened to recall that when Mr. Tyrer was in the chair a vote was taken on the question, and it was equal. Then the meeting got into a fog as to whether there was not some confusion between agricultural and horticultural poisons, and Mr. Dobbs and others pointed out that Mr. Gilbert's remarks referred solely to agricultural poisons. Mr. Gilbert's motion was then reduced to the following terms:

That this Section regrets the exclusion of Ireland from the Poisons and Pharmacy Bill, and requests that Clause 7 should be restored to it.

Mr. MacEwan questioned if the Chamber, a body meeting in London, was competent to interfere with Irish affairs, and he further asked the Chairman if such a motion as that submitted should not be the subject of notice. The Chairman said that it would be better if the motion should include an expression of Mr. Gilbert's opinion in regard to the condition of affairs in England; and in the course of some further conversation Mr. MacEwan suggested that action in the direction suggested by Mr. Gilbert should not be taken until inquiry had been instituted in Ireland. This met Mr. Gilbert's view. Mr. Tyrer then brought the discussion back to more formal lines by saying that those present were practically agreed that the Bill includes what is thought to be reasonable, and is not an attack on retail chemists. ("No, no," from Messrs. Gilbert, Dobbs, and others.) He recalled the old meeting, and said the effect of it was to clear the air; and he thought that if the suggestion as regards Ireland were to be definitely made, it should be done in such a way that it would appear to be on an equal footing with Great Britain. Eventually the Chairman decided to adjourn the meeting until Tuesday, May 8, or such other time as appears desirable. This was unanimously agreed to. Mr. Tyrer suggested that before then the Chairman should draw up his suggestions in regard to Clause 6 which would meet the objection he had raised to the use of the word "Poison."

SPIRIT IN CANADA.

The Chairman then reported that he had received a letter from Mr. E. A. Webb, who, with Mr. Millard, had been

appointed a sub-committee to inquire into the importation of spirituous medicinal preparations into Canada, and Mr. Webb had ascertained that there are some provisions of which advantage might be taken.

WORKMEN'S COMPENSATION BILL.

It was reported that, on the suggestion of Mr. Gilbert, the Parliamentary Committee of the Manufacturers' Section of the Chamber had agreed to embody in their report a recommendation that an amendment should be put down to the effect that, in cases where workmen employed in a so-called dangerous trade are paid an exceptionally high rate of wages in view of the extra risk, they should not be entitled to compensation on the same scale, especially in view of the obligation of the employer to take precautions of an expensive character to prevent accidents to workmen or injury to their health. Mr. Gilbert now formally moved, Mr. Thomas Tyrer seconded, and it was agreed that the Chemical Trade Section approve in principle of the proposed amendment. Mr. Tyrer also raised the question whether fines should not be inflicted, and the Assistant Secretary mentioned in this connection the Truck Acts Committee recently appointed.

Rosemary Oil.

By E. J. PARRY, B.Sc., F.I.C., F.C.S., and
C. T. BENNETT, B.Sc., F.C.S.

IT has been observed for some time past that rosemary oil of Spanish origin is frequently levorotatory, and it has been assumed that this is due to adulteration. Gilde-meister and Hoffmann, in their book on essential oils, state that pure rosemary oil is always dextrorotatory, and, further, that the first 10 per cent. distilled is likewise dextrorotatory. Messrs. Schimmel & Co. in a recent report state that they have observed a dextro-lyrate oil giving a levogyrate fraction on distilling the first 10 per cent., and consider that this was due to the admixture of other plants with the rosemary. We have recently carried out investigations which throw some light on this matter, the results of which are here given.

We have had consigned to us authentic specimens of rosemary herb grown in Spain and France respectively (some 300 lb. in all), and the oil from these has been distilled in the laboratories of Messrs. Wright, Layman & Umney, Ltd., under the direct supervision of Mr. J. C. Umney. We are also indebted to Mr. H. E. Burgess for the distillation of one sample. The results of our examination of these oils prove beyond doubt that a levorotatory oil is consistent with purity, and also a dextrorotatory oil giving levorotatory fractions.

It is customary in France to distil the oil from herb which has been collected after the flowering period (February and March) and dried for about eight days in the sun. In Spain the distillation goes on all the year round, and some variation is therefore to be expected. Both fresh and dried herbs are employed, the latter when the supply is greater than the capacity of the stills and when it has to be carted from a long distance. In the dry state the leaves can be readily separated from the stalks by threshing, but in the fresh condition it is impossible so to separate them. The yield from the fresh herb is from 0.4 to 0.75 per cent., while the dried leaves yield about 1 per cent. of oil, which is of finer quality than that from the fresh herb. The characters of three typical samples were as follows:

—	1 (Spanish)	2 (French)	3 (French)
Source ...	Leaves alone	Leaves & stalks	Leaves alone
Specific gravity ...	0.917	0.897	0.914
Optical rotation ...	+2° 30'	-8° 30'	-3°
Esters calculated as			
bornyl acetate ...	3.2%	3.0%	3.6%
Total borneol ...	19.7%	10.9%	18.5%
Optical rotation of			
first 10 per cent.			
(100 mm.) ...	-1°	-12° 30'	-10°

No. 1 was distilled from herb collected towards the end of

last summer and dried in the sun. It consisted entirely of leaves which were well developed and of a fine green colour. The yield was 0.89 per cent.

No. 2 was distilled from stalky herb in the dried condition, collected in February last. The proportion of stalks amounted to nearly 60 per cent. Yield of oil 0.4 per cent.

No. 3 was distilled from the same consignment as No. 2, but the stalks were separated and the leaves alone distilled. They yielded 1.09 per cent. of oil, containing a high proportion of borneol. The leaves were somewhat discoloured, probably owing to some fermentation having taken place.

The stalks alone yielded very little on distillation, showing that they contain a much smaller percentage of oil and that of little odour-value. Our results show that the levorotatory constituent (levo-pinene) occurs in greater proportion when the stalks are included, and that an inferior oil is then obtained. It is evident that oils derived from carefully picked leaves yield fractions which are levogyrate.

The following are the results of fractionation of the above oils:

No. 1.

Fraction	Sp. Gr.	Rotation	Refractive Index	B.P. commencing at
1 ... 10%	0.884	-1°	1.4676	152° C.
2 ... 10	0.890	-1° 10'	1.4680	156° C.
3 ... 10	0.895	-1° 20'	1.4681	159° C.
4 ... 10	0.902	+1°	1.4682	162° C.
5 ... 10	0.903	+1° 20'	1.4683	163° C.
6 ... 10	0.911	+2°	1.4686	165° C.
7 ... 10	0.922	+2° 30'	1.4700	169° C.
8 ... 10	0.940	+3°	1.4735	177° C.
Residue 20	Partially crystallised		1.4885	185° C.

No. 2.

Fraction	Sp. Gr.	Rotation	Refractive Index
1 ... 10%	0.874	-12° 30'	1.4660
2 ... 10	0.878	-13°	1.4670
3 ... 10	0.879	-13° 30'	1.4670
4 ... 10	0.883	-12° 20'	1.4670
5 ... 10	0.886	-11° 20'	1.4670
6 ... 10	0.891	-10° 30'	1.4670
7 ... 10	0.896	-6° 30'	1.4678
8 ... 10	0.909	-5° 30'	1.4702
Residue 20	—	—	1.4859

No. 3.

Fraction	Sp. Gr.	Rotation	Refractive Index
1 ... 10%	0.885	-10°	1.4660
2 ... 10	0.888	-10°	1.4680
3 ... 10	0.891	-9° 20'	1.4685
4 ... 10	0.896	-7° 70'	1.4686
5 ... 10	0.900	-6° 70'	1.4686
6 ... 10	0.909	-4° 50'	1.4686
7 ... 10	0.921	-1°	1.4686
8 ... 10	0.938	+2°	1.4697
Residue 20	Partially crystallised		—

It is therefore quite clear that the borneol is derived principally if not entirely from the leaves, and a genuine levorotatory oil containing a comparatively low percentage of borneol may be assumed to have been distilled from both leaves and stalks, since the leaves alone yield an oil which has a finer odour and higher borneol-content.

IONONE SUIT.—The celebrated ionone or artificial violet suit, which has been before the Courts for over six years, was decided in favour of G. Lueders & Co., of New York, in the United States Circuit Court on March 27.

The Chemist in South Africa.

By ONE FROM THE OLD COUNTRY.

LIKE everything else in South Africa at the present time, the drug-trade is suffering from the general depression, and, taking things all over, the man with a good dispensing business at home is in a much happier position than his brother in sunny South Africa. Prices are very little higher than at home, when the heavy import-tariff and freight are considered. The following prices will bear this out: S.V.M., 6*d.* per quart bottle (costs 2*s.* 2*d.* per gal.); Eno's salt, 2*s.* 6*d.*; Fellows' syrup, 3*s.* 6*d.* and 5*s.* 3*d.*; odol, 1*s.* 3*d.* and 2*s.* 6*d.*; Calvert's tooth powder, 6*d.*, 1*s.*, and 1*s.* 6*d.*; Mackenzie's smelling-salts, 1*s.*, 1*s.* 1½*d.*; patents, 1*s.* 3*d.*—to the cost of the above have to be added 25 per cent. duty and about 10 per cent. for freight, etc., so the margin is not great, especially as rents are from 20*l.* to 80*l.* a month. Dispensing-prices are a little better—6-oz. 1*s.* 9*d.* to 2*s.*, 8-oz. 2*s.* to 2*s.* 6*d.*, and pills 1*s.* doz.—but we never get enough of it, there being in Durban thirty chemists for a white population of 30,000. Customers as a rule are more given to grumbling than at home, and have very little sympathy with the chemist, whom they look upon as the natural enemy to thrive.

Nearly all chemists do a large photographic trade, and where at home 25*l.* to 50*l.* would represent a nice little stock, here it would run into a few hundred pounds, and a large percentage of this goes bad owing to the trying climate. Prices are: P.O.P., 1*s.* 3*d.* per packet; plates—quarter-plate, 1*s.* 3*d.*; 5×4, 2*s.* 3*d.*; half-plate, 3*s.*; whole-plate, 5*s.* 6*d.*. Sundries show a fair margin of profit, and these, along with his own specialities, the enterprising chemist always endeavours to push.

The class of customers is varied. There is the newcomer, who does not forget to tell us the price of our goods at home, and looks on our high charges as being out of proportion, forgetting altogether the duty, freight, high rent, and wages. Then we have the Indian, with a keen eye for the main chance; the Kafir in his native simplicity, whose chief demand is for jalap and worm-draughts; the Chinaman, who is of the better class, and those in Durban carry on general stores of which many a Britisher might be proud. Add to these Germans, French, Russians, Japs, and Jews. Fortunately all are able to speak English more or less, and the assistant who has a very rudimentary knowledge of Kafir has all the linguistic qualification he requires. In up-country districts a knowledge of Dutch is always an advantage.

The hours of business are very long: 8 A.M. to 9 P.M., Saturdays 10 P.M., Sunday duty from five to nine hours; and where there are only one or two assistants there is very little time off. The qualified assistant before coming to South Africa should give the matter very careful consideration. If he comes out on "spec." he should be well provided with funds; if, on the other hand, he comes out on a three-years' engagement, he should satisfy himself that the situation is one which would suit him. The wages of qualified men are very poor compared with those of tradesmen, etc.; 15*l.* a month may appear a big salary at home, but if a man saves 4*l.* of it a month he must lead a very quiet life. A room is in most cases provided; and this of course means the usual amount of night-duty, for which there is no recompense.

The climate of Durban during the summer months is very relaxing, but in the up-country districts it is almost ideal. Chemists are not required there, however. The writer would not advise assistants to come out here unless the salary is particularly good and they have made up their minds to make this country their home, for it is almost impossible to settle down at home after spending a few years in South Africa; and one can only look forward to a trip home, which means the savings of many years.

I am optimistic enough to think that there is a great future before this country, but the tide will only turn when the goldfields have been forsaken for the more lasting industry agriculture. At the present time sugar-cane, tea, and coffee are being successfully grown in the Colony, and arrangements are being made for cotton-growing. For unqualified assistants there is very little demand, probably

because the qualified man can be had for such a small salary. The Natal qualifying examination is a long way behind the Minor, and those who hold the latter qualification are not shy about making the fact known.

The Transvaal Minor.

A CANDIDATE who was successful at a recent examination by the Transvaal Pharmacy Board for qualification as a chemist and druggist in the Colony sends us the following account of his experiences:

The first subject was dispensing, and I found the following prescriptions waiting for me:

(1) Ol. jecoris aselli	m18
Syr. calc. lactophos.	m18
Aq. calcis	m18
Gum. acaciæ	q.s.
Ol. cassiæ	m. 3½
Aq. ad	3j.

Mitte 3iv.

Sig.: The Emulsion.

(2) Liq. arsenicalis	4.0
Liq. hyd. perchlor.	70.0
Aq. ad	120.0

Coch. med. cum quantum santo aquæ bis in die.

(3) Ext. nuc. vom.	gr. ½
Pulv. digital.	gr. 8
Acid. arsenios.	gr. 100
Excip.	q.s.

M. Ft. pil. Mitte 25.

One at night.

(4) Make 3ij. solution of AgNO₃, so that 5j. added to 3x. aquæ makes a solution 1 in 3,000. (State quantities used on label.)

(5) Make syrupus, P.B.

In the first I used 9 grains gum to each 5j., and turned out a beautiful emulsion. In the second I used liq. arsen. hydrochlor. The only thing about No. 3 was to get the correct fraction. In No. 4 1 grain in 3,000 grains was meant, and I reduced 5x. to grains, multiplied by 16, and divided by 3,000, and used AgNO₃ to 3ij. I had the P.B. for No. 5.

The next subject was chemistry. I first had to estimate the amount of FeSO₄ in a powder given me. I was given decinormal potassium permanganate to titrate with. I did that all right, and then had about three-quarters of an hour *viva voce* examination, in which I was asked a good many questions.

The mode of preparation and the reactions of the following: Sodii carb., chloroform, chloral hydrate, aniline, acetic acid, iodoform, potass. iodid., calomel, mercuric chloride, arsenic, glycerin, alcohol, carbolic acid, and one or two others. Then I had to read a barometer, answer a few questions on atmospheric pressure and temperature, evaporation and boiling, solution, etc., and then describe a microscope. After this I was given a salt to analyse, which proved to be cerium oxalate. That finished the first day.

Next morning my opening subject was materia medica, in which I think I did very well. Then on to prescription-reading, which did not worry me much. Pharmacy was the next subject, and the examiner covered a good deal of the B.P. while I was with him. Ext. ipecac. liq., how to make and standardise; potass. acetat., sal. alembroth, pulv. scammon. co., pil. scammon. co., coal-tar, liq. picis, and a few preparations of mercury; distillation, glycerin, plumbi acet., glyc. acid. boric. (what happens in its preparation?), and a few others, and questions as to doses. The last subject was botany, and in this I did fairly well. I had to describe various natural orders and pick out flowers belonging to them, give definitions of tubers, legumes, drupes, etc., and last of all recognise microscopic specimens. I had six slides given to me, and I knew them all. It was a relief when I was told, "That will do."

The result was not announced until next day, when I found that I was one of the six successful candidates.

THE following application was received the other day by a well-known Scotch chemist who advertised for an apprentice:

I hereby offer my services for the situation. I am not very smart just now, but expect to waken up soon.

An optimist like that deserved the situation, but he did not get it.



I HAVE just returned from a visit to Rhodesia, and the photographs reproduced in these notes show some of the directions in which the country is developing. The



PAPAW-TREES AT MELSETTER.

photographs were taken by Mr. Odum, of the Rhodesian Government Agricultural Department, and I feel sure that



FIELD OF TURKISH TOBACCO.

This is on the estate of Barker Bros., Bulawayo. The plants are grown from Turkish seed raised in Rhodesia, where there are now many tobacco-farms growing different kinds of tobacco. From the Turkish as shown fine cigarettes are made.

readers of THE CHEMIST AND DRUGGIST will be interested in seeing for themselves that Rhodesia has as great possibilities

above ground as in the bowels of the earth. The title-picture is from an ostrich-farm at Charters.

There is novelty in travelling these parts. In order to get to certain places—*e.g.*, Livingstone Hospital—first, I had to walk a long distance; secondly, I had to cross the Zambesi in a small boat paddled by niggers (avoiding the hippopotamus and crocodiles); thirdly, I had a few miles to go on horseback; and, finally, by a little influence, I was able to return in a coal-truck on the construction-line to the hotel at Victoria Falls. It is all a matter of "go as you can." I was very much impressed with many parts of Mashonaland and Matabeleland. Undoubtedly there must be great agricultural prospects before Rhodesia. It is a country vastly different from the great and monotonous stretches of barren karoo further south. I hear from many old Rhodesians that cattle thrive and multiply wonderfully, and that diseases—*e.g.*, red water—are rapidly being stamped out. The country also affords wonderful opportunities for the production of all kinds of fruit and vegetables. Tobacco is now produced of a high quality and in plentiful supply. This industry is going ahead fast. I believe rubber and cotton will do very well also in certain parts. Of course at present Rhodesia is very thinly populated, but the people you meet there are made of the "right stuff," and seem to take a pride in their country and its welfare. Invariably the question was put to me, "What do you think



PINEAPPLES GROWING AT MELSETTER.
The fruit obtained is exceptionally fine.

of our country?" If you can speak well of it, you will meet with a most kindly reception, and find friends everywhere willing to do what they can to make your visit a pleasure. There is no doubt the vast lands of Rhodesia are capable of settling thousands upon thousands of farmers, but to start farming one must have means. It is no place for the masses at present. Everything (travelling, etc.) is most expensive.

W. ELFORD ROGERS.

A STIRLING CHEMIST has sent to a local newspaper a curious extract from "Hollinshead's Chronicles," 1511, which, he thinks, should interest the advocates of whisky as a therapeutical agent. The ancient writer distinguishes

Three sortes thereof simplex, composita, perfectissima. Beyer moderately taken it sloweth age, it strengtheneth youth, it helpeth digestion, it cutteth fleume, it abandoneth melancholie, it relisheth the harte, it lighteneth the mynd, it quickeneth the spirites, it cureth the hydropsie, it healeth the stranguy, it puffeth away ventosity, it kepyth and preserveth the head from whyrlyng, the eyes from dazelyng, the tongue from hispyng, the mouth from snafflyng, the teeth from chattering, the throte from ratlyng, the heart from swellng, the hands from shivering, the sinowes from shrinkyng, the bones from akyng, the marrow from soaking, and trulie it is a soveraign liquor if it be orderlie taken.

There is much merit in the final saving clause.

Correspondence

TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. Publication of letters does not imply our agreement with the arguments or approval of the statements therein. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects presumably of interest to our readers generally. Letters received after the early posts on Wednesday cannot as a rule be dealt with in the current week's issue.

BUSINESS INFORMATION.—We have very full records of the makers or agents for articles and products connected with the chemical and drug trades, and supply information respecting them by post to inquirers. Inquiries regarding any articles which cannot be traced in this manner are inserted under "Information Wanted."

Linaloe Oil.

SIR,—In reply to Mr. Simmons' remarks in your issue of April 14, we should like to point out that our determinations of linalol-content, carried out by the usual methods, were practically confirmed by the results of fractionation. As it is a well-known fact that some decomposition occurs during acetylation and saponification, we suggested the limits of 195° – 200° as the range which would include the greater proportion of linalol and might be fairly taken to represent approximately the proportion present. Mr. Simmons' figures are of interest, as they confirm our observations, although no apparent percentages of linalol are given. In our experience an hour to an hour and a half is sufficient for acetylation, the results of two determinations carried out on similar lines being practically identical. The figures given by Mr. W. Naumann in your last issue further confirm our results and represent samples of good commercial quality.

Yours faithfully,

ERNEST J. PARRY.

C. T. BENNETT.

London, April 21.

The Professional Side:
Shall we say "Good-bye" to it?

SIR,—Something like a year ago I pointed out that a fair way to deal with drug companies would be to register them under certain conditions ensuring the safety of the public and prohibiting the formation of new companies, unless composed of qualified persons. In other words, that the Council should endeavour to apply to the company problem exactly the same treatment as that employed when the Pharmacy Act of 1868 came into force, suppressing, after a given time, existing "bogus" companies. I will not dwell on any "might have beens" (although incidentally I note that Lord Crewe seems to have just a slight—a very slight—idea of that theory himself), or suggest that my plan would have excelled all others. Practically, it would not have benefited the trade for a very long time, but I had in mind then very much the same ideas with regard to the professional side of pharmacy and the future of pharmacy as are so extremely well put by your correspondent "Pharm. Chemist." I trust the loyal members of the trade will rouse themselves to a recognition of the principle so clearly laid down. It is a principle which should even appeal to those who have decided to support the "compromising party" and rest content. To put it plainly, the question is not whether seven years is long enough to wear out a signboard, but whether there shall be no better status for pharmacists than that in future to be enjoyed by the "chemist fellow" from Whiteley's, produced in precisely the same way as a registered plumber or a motor-man "as per your esteemed order." At first sight an effort in this direction looks like empty glory. We hand our living over to companies and then ask for a name, but not necessarily an empty name—a title which would give pharmacists proper something to build upon—it could be nothing more. But this is where we must draw the line between immediate business interests and the value of a protected title, because, after all, there are other interests in connection with the practice of pharmacy—and plenty of people to recognise

and support them—besides the barter of cheap physic, with the influence of the "Daily Mail" thrown in. I trust something in this direction may yet be accomplished. The pharmacist is at present nearly stripped of everything worth having, but, as you very sensibly remind us in your leader of April 21, legislation has only reached a certain point so far, and surely the "ordinary chemist" can secure just one little crumb ere the cloth is removed.

I am, Sir, faithfully yours,

Penzance, April 24.

WALTER H. KEEN.

Boots' Advertisement.

SIR,—In the remarks in your last issue respecting our page advertisement you say you could name a dozen members of the Council whose shops are not within the region of any of Boots' businesses. This may be so, but the exact wording of the advertisement reads that nearly all the members of the Council are in active competition with Boots and other cash chemists. When we said companies are bound by law to engage a qualified manager for each branch we were speaking more especially of our own companies, not of those one-man companies of which I have heard so much, but personally seen so little. It is possible these concerns may be carrying on business without a qualified man, as, their trade being so small, they would know each customer. We, however, who have to look to the general public for our custom, would not and could not do this, as our managers if unqualified would be liable to a fine twenty times a day. The Pharmaceutical Council is so prejudiced against us that whereas they prosecuted us on one occasion for not exhibiting our name at one of our branches, they now are moving heaven and earth to get the same name extinguished, and we could not expect to escape prosecutions at our shops if we had not qualified managers in charge.

Yours faithfully,

Nottingham, April 23.

JESSE BOOT.

SIR,—We think the suggestion made by Mr. T. C. Osborne in your issue of April 21 an excellent one. We have had printed for free distribution to any chemist applying for same window-posters measuring 16 in. by 24 in., which read as follows:

THE CHEMISTS' REPLY TO BOOT'S ADVERTISEMENTS

MR. BOOT IS NOT A CHEMIST!



neither can he legally
call himself a Chemist.



*The title "Chemist" can only be obtained by
passing a severe qualifying examination.*

MR. BOOT HAS NOT PASSED

this examination, and he has therefore failed to give
the PROOF WHICH THE LAW REQUIRES
OF HIS COMPETENCE TO CARRY ON THE
RESPONSIBLE CALLING OF A CHEMIST

THE PROPRIETOR OF THIS ESTABLISHMENT is a Legally Qualified Chemist, and your Medicines are here compounded under personal supervision with drugs and chemicals of absolute purity, and of the highest remedial value, at the lowest prices consistent with the accuracy, skill, and care which the conscientious performance of these important duties demands.

We shall be pleased to post, free of charge, to any individual chemist or local chemists' association as many

copies as required. An advertising campaign such as suggested by Mr. Osborne ought to be undertaken by the Pharmaceutical Society in return for the annual subscription and the examination-fees, but as it is hopeless to expect them to take the matter up until too late, we would suggest that a fund for this purpose should be started immediately. This, we are sure, would meet with most encouraging support from both wholesale and retail, and we should be most happy to subscribe twenty guineas. The window-poster would in the meanwhile be giving great and useful publicity while the advertising campaign is being organised. We would suggest that the chemists in every town should arrange to exhibit the poster simultaneously, so as to produce the maximum effect. This, with a display of leading lines at Boots' prices, which, as we have repeatedly shown, give the retailer over 100 per cent. profit, should have a very great effect on the public, and at the same time be profitable to the chemist. May we also suggest that chemists should give the preference, in placing their orders, to wholesale houses the proprietors of which are, like themselves, properly qualified chemists?

Yours faithfully,

FOR THE STANDARD TABLET CO.,

H. W. K. Pears, Ph.C., Proprietor.

Hove, April 21.

SIR,—I cannot understand why the title "Boots Cash Chemists" sticks in the throat of the individual chemist. The title "Chemist" is not claimed by Mr. Boot himself, and he has never sought to do so, but he has time and again proved that Messrs. Boots, Ltd., are chemists, and full of them—in fact, overflowing with them. In every branch is employed at least one qualified chemist, and in many cases more than one. Mr. Boot is not bound to do this, any more than is a private chemist with his branch; but it stands to reason that the public are, as a consequence, afforded the fullest possible protection, which is more than can be said of many private chemists who employ unqualified men as branch managers, work them to death, pay them a bare living wage, and vest in them all the responsibility.

Yarmouth.

A. E. J. (26/37.)

SIR,—I cannot see why there should be so much controversy relative to the Boots companies or others using the name of "chemists" so long as they conform with the law by employing a qualified man or manager in each branch. The Pharmaceutical Society has again and again proved in courts of law that poisons may be sold freely by them personally or even as a cover to others without fear of prosecution where there are managers or assistants who are not qualified. Surely the humility at not being able to sell poisons to their customers without running a great risk of being fined is sufficient, although I confess it is done still by stores, and very largely by private chemists' assistants, the proprietors of which have occupied high positions as Local Secretaries of the Pharmaceutical Society, to whom we should look for example. So long as this is done, and the fines are paid by masters of affluence who regard 5*l.* or 10*l.* as nothing, so will the law be as often broken. The company drug-stores in no part of the country are to blame. Had our Society been governed by Presidents of the stamp we have now, and given their whole heart and soul to the interests of chemists, companies would never have got the footing they have. The chemist would not conform to modern ideas, and this gave the opportunity of companies filling the gap. Every credit is due to Mr. Jesse Boot for his thorough businesslike capacity in working up such an immense concern from small beginnings, and giving qualified men good positions which they could not get elsewhere. Every man of them is thoroughly up to date, and if he is a good salesman so much the better. His services are well paid we know. There is much to put up with, as there is in all businesses, but the company works like clockwork, purely owing to the grand system at their headquarters.

FAIRPLAY. (26/36.)

The Immorality of Company Law.

SIR,—I enclose a report of the annual general meeting of the Army and Navy Co-operative Society, Ltd., published in the "Daily Telegraph" of last Saturday, April 21. In that report you will notice that Lord Ebury, acting in the dual capacity of chairman of the society and member of the House of Lords, has thought fit to make some unwarrantable

remarks on what he sarcastically calls "the Association of retail chemists which had adopted the style of the Pharmaceutical Society." The immoral tendency of company law in this country is a bad enough disgrace, being nothing more (in some cases) than a cover for fraud and deceit; but what is the country coming to when a member of our High Tribunal is found to be acting and giving expression to his ideas in the manner indicated? The "curiously composed House of Commons" may be ever so "curious" in this noble lord's estimation; but the significance of the "curious composition" in the eyes of the public remains just the same.

The country would do well to err on the side of curiosity even to the limited extent of simply copying the German Company Law, letter for letter, for instance, because the impetus afforded for exalted personages and others to inflict the community as they have done in the past, and are now doing, would thereby be brought to a desirable termination, and in its place a "moral" tendency created, which surely ought to be the first duty of a State aiming at a high standard of efficiency. The iniquities now existent under the prevailing system are immoral in tone and wrong in principle.

Faithfully yours,

London, E.C.

F. C. HERON.

Shakespeare Modernised.

BY ONE OF THE TRIBE (26/42).

SCENE.—No. 17 Bloomsbury Square. A Balcony.

Enter MR. ROBINSON (as Juliet). Below MR. BOOT (as Romeo).

JULIET (speaks in a cajoling voice):

'Tis but thy name that is my enemy;
Thou art thyself, though not a Chemist.
What's Chemist? It is not nard, nor foad,
Nor balm, nor face poudre, nor any such
Belonging to the business. O, be some other name!
What's in a name? That which we call a dose
By any other name would be as meet!
So Jesse would, were he not chemist called,
Retain that cheap perfection which he owns
Without that title. Jesse, doff thy name,
And for that name which is no part of thee
Take all the patents.

Pharmaceutical Council Election.

SIR,—When the question of territorial representation was under discussion it was generally agreed that, although hardly practical, it had much to recommend it, as it would bring councillors into closer touch with members of the Society and conduce to a better understanding by the Council of the needs of pharmacists. For many years a large district, comprising the counties of Lincolnshire, Notts, Derbyshire, Leicestershire, and Rutland, has been without a direct representative; but now an opportunity occurs for remedying this, as one of the candidates, Mr. F. Ross Sergeant, is a resident of Nottingham, which is very central for the above-mentioned district. I therefore hope that members will bear this in mind when recording their votes, and support the candidature of Mr. Ross Sergeant. I ask this the more freely because I know that in Mr. Ross Sergeant we have a candidate well fitted for the position, who is locally held in high esteem for his sterling qualities and the excellent services he has rendered to the Society and local Pharmaceutical Association.

Yours truly,

Nottingham, April 23.

WILLIAM GILL.

[The Nottingham and Notts Pharmaceutical Association has issued a circular similar in effect to the foregoing.]

The Living-in System.

SIR,—I was much interested in reading the letter of "Max," with regard to Store treatment, in the current issue of the *C. & D.* From my own twelve years' experience in pharmacies at home and abroad I can fully endorse the statements made by your correspondent of the "living-in" arrangements meted out to assistants, both qualified and unqualified, in private pharmacies. In one well-known pharmacy in London the bedroom allotted to me had no blind or curtain to the window, not a looking-glass of any description, and the chest of drawers had three drawers full of the children's clothes. My term of service with that employer was only one month and two days. I could not afford at that time to forfeit a month's money in lieu of notice, or I most certainly would have done so. I have not yet sold myself to the stores, and have no intention of doing so. My remedy is the personal interview, wherever pos-

sible, and I am not afraid to ask questions. Why should not the assistant have a reference of his employer, as well as *vice versa*?

April 21.

Yours faithfully,

АПЕКА. (24/27.)

SIR,—Your correspondent "Max" appears to have been very unfortunate in his experiences as an indoor assistant—unless, indeed, he is drawing upon an all too fertile imagination. Surely such cases as he speaks of must be quite exceptional. I should have thought chemists who were in a position to employ qualified men would not have been of such a very inferior class to their assistants, and (in my innocence) should have imagined that most of the employers would have had almost as great a horror of "dirty and slovenly surroundings" and "poor or ill-cooked food" as even "Max" or any other of the "really first-class men" who have apparently sold their birthrights for a "mess of pottage."

Yours truly,

СЕПТИК. (23/35.)

Opening Itrosyl.

SIR,—It is not wise to allow itrosyl to come into contact with rubber. It and similar liquids exert powerful solvent action on that substance, and, what is more important, a taste of rubber is imparted to the product—at least, that is so to one possessed of a delicate palate. The simplest plan is to break the container in a stout wide-mouthed stoppered bottle under the spirit, and strain through "cotton-wool" which has previously been washed with a little spirit.

Yours faithfully,

ABEL SCHOLAR. (24/62.)

Oil of Cermis.

With reference to the order for this preparation "for chicken pocks" mentioned in "At the Counter" last week, *Messrs. Young & Co., Bristol*, inform us that oil of kermes is meant. For this syr. rhæados is given in Bristol, but sometimes simple syrup coloured with an aniline dye. It is often pronounced "karmas." Our correspondents suggest that the "Durh Powder" may be a perversion of Dover's powder.

Window-shows.

SIR,—Under this heading a letter appeared in your issue of April 14, signed "Brightonian," in which the writer states: "An advertisement appeared in the 'Daily Mail' inviting canvassers to write for particulars 'How to make a fortune.'" And in your comments you say, "The article referred to was Lineal liniment." We shall be obliged if your correspondent will be good enough to give us the date of the "Daily Mail" referred to, as it is untrue. This company never inserted such an advertisement either in the "Daily Mail" or in any other paper.

Yours faithfully

(For the Lineal Company),
M. DAVIES.

London, April 20.

Dispensing Notes.

A Peculiar Preparation.

SIR,—I had the following prescription to dispense:

Collargol	...	...	...	...	½ per cent.
Alcohol (96-per-cent.)	...	...	...	...	70 per cent.
Hard soap	...	...	...	...
Wax	...	...	...	...
A little Glycerin.	...	...	...	...

Ft. unguentum.

The ointment is soft, smooth, brown, and smells strongly of alcohol.

I have made it three separate times, but cannot obtain anything like a presentable article. How it is possible to obtain a brown product I fail to see, as collargol is of a bluish or very deep slate colour. I should be glad if you will insert this in the *C. & D.*, so that I can gather the information from some more successful chemist. I may say that I made it up thus:

Collargol	...	...	...	...	½ per cent.
Alcohol. (96-per-cent.)	...	...	...	...	70 per cent.
Saponis dur.	...	...	...	...	10 per cent.
Ceræ flav.	...	...	...	...	15 per cent.
Glycerin.	...	...	...	...	4½ per cent.

L. R. D. (4/31.)

[We have submitted this to an experienced dispenser for trial, and his report is: "In my hands this is impossible. I fail to see how your correspondent gets 70-per-cent. alcohol in. I can say its colour should be blue, not brown."]

Legal Queries.

See the "C. & D. Diary, 1906," for much legal information about all trade matters. In any circumstance not covered by the articles therein, state the case explicitly with all particulars and submit to the Editor.

Quinine (22/67).—It is the fact that the "quinine-wine" referred to contained no wine at all, but was composed of syrup, salicylic acid, and other ingredients; but the material part of the charge was that it contained no quinine. It would be an offence under the Sale of Food and Drugs Acts to sell as quinine-wine a preparation not made with orange-wine as directed in the British Pharmacopœia, and we are of opinion that a preparation made from sugar and water flavoured with essence of orange, preserved with salicylic acid, and containing a salt of quinine, ought not to be described as "quinine-wine."

Aubrey (26/29) puts the following question: "I am a registered chemist and druggist. Can I make arrangements (through paying rent) with a person (unqualified) in another town, who carries on a business as drug and patent-medicine vendor, to sell in his shop poisonous dips, I engaging a qualified person to sell on the premises?" [It is quite legal for "Aubrey" to do this, but the unqualified person had better look after himself, as on the surface it would seem that "Aubrey" or the qualified assistant acts as "cover."]

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

C. H. C. F. (213/30).—(1) Distillation is the only effectual way of de-hydrating the eau de Cologne, but an improvement can be brought about by shaking up with plaster of Paris, which method abstracts a good deal of the water. (2) Essential oil of camphor is equal, if not superior, to turpentine in the manufacture of white oils.

Paraffinum (2/5). The proportions of hard and liquid paraffin required to make a soft paraffin could be found out by a few experiments, as they depend on the melting-point of the hard paraffin and of the soft paraffin.

P. A. F. (Ostend) (4/50).—BOOKS ON TUBERCULOSIS.—Plauzoles' book (*C. & D. Diary*, p. 514) is limited in scope. Hillier's "Tuberculosis," Latham's "Diagnosis and Treatment of Pulmonary Consumption," and Ruata's "Pulmonary Tuberculosis" are all modern and give fuller information.

Assistant (3/1).—BOOKS ON SIGHT-TESTING.—See *Diary*, p. 513.

F. (4/51).—BOOKS ON PAINT-MIXING.—See *Diary*, p. 510.

T. S. (Johannesburg) (13/29).—BLACKENING COPPER.—The following are the methods in use: (1) Immerse in a dilute solution of ammonium sulphide, rinse in alcohol, burn off the alcohol, and dip in zapon. (2) Potassium sulphide used similarly in ¼ to ½ per cent. solution. (3):

Mercury sulphide	...	...	...	50 grains.
Potassium sulphide	...	...	...	50 grains.
Sodium hydrate	(20-per-cent. solution)	...	...	1 oz.
Water	...	...	...	3 oz.

This is used in like manner to (1), and the action is probably due to the potassium sulphide rather than the mercury salt. (4) Dissolve potassium sulphide 25 grains in water 3 oz., and saturate the hot solution with freshly precipitated antimony sulphide. The copper article is dipped in the warm solution, scratch-brushed, and re-immersed. (5) Immerse the copper article in a solution of copper nitrate (1 in 3), shake off excess of liquid, and heat on a hot-plate or in a closed muffle-furnace until the copper salt is decomposed into black copper oxide. (6) Barium sulphide 100 grains, water 1 pint. If used hot a black colour is at once imparted on immersion.

J. T. D. (4/35).—You can only be sure that a name is not registered and is registrable by applying for registration. See *Diary* for the way to proceed.

W. G. B. (14/51).—CLOCK-FACE VARNISH.—A solution of celluloid in acetate of amyl or a borax solution of white shellac would probably be found more suitable for this purpose than alcoholic varnishes.

J. W. (25/16).—The only means of restoring the bright surface of the etched glass is to have it repolished. This is done by rapidly revolving wheels made of discs of cotton fabric. A glass-factory may do the work.

Rectification of the Register.

AN asterisk prefixes the names of the following registered chemists in the "Register of Chemists and Druggists, 1906." This means that their present addresses have not been communicated to the Registrar of the Pharmaceutical Society, 16 Bloomsbury Square, London, W.C. Failure to do this before the end of the year renders each person named liable to be struck off the Register; therefore those named should communicate with Mr. Bremridge without delay.

Acton, Victor Guernsey, 21 Marjorie Grove, Clapham Common, London, S.W.
 Adams, John, 105 Whitefield Road, Liverpool.
 Adamson, John Robert, 10 Alexander Place, Newcastle-on-Tyne.
 Airey, George Patteson, 262 High Street, West Bromwich.
 Allan, David, 25 Brunton Terrace, Edinburgh.
 Allen, George William, Hawkwell, Hockley, Essex.
 Almack, William, West Tanfield, Yorks.
 Anderson, George, 124 Cloudesley Road, Barnsbury, London, N.
 Angior, John Littler, 94 Whitechapel Road, London, E.
 Appleyard, Charles Percival, 2 Eastfield Road, Cairo Road, Walthamstow.
 Askew, Frederic, 99 Ribbleson Lane, Preston, Lancs.
 Austen, Charles Wilson, Church Street, Weybridge.
 Bach, Charles Vincent, 68 Gilden Hillock Road, Small Heath, Birmingham.
 Bagshaw, Robert Reece, 24 Market Street, Broadbottom, Lancs.
 Banham, Albert Edward, Iona, Norwich Road, Thornton Heath.
 Bannatyne, Ebenezer, Harbour Street, Irvine.
 Barnett, Wm. Zachariah, Norton Park, Burslem, Staffs.
 Barton, Frederick Keal, 191 Ladbroke Grove, London, W.
 Bates, John Freer, 99 Wilmslow Road, Didsbury, near Manchester.
 Bean, Percy, 42 Granville Road, Blackburn.
 Benington, Phillip, 59 Newsham Drive, Liverpool.
 Berry, Henry Burton, Old Bull Hotel, Blackburn.
 Billyard, William Frederick, 95 Wellington Street, Moss Side, Manchester.
 Bingley, Richard, Barnes, London, S.W.
 Bird, Frederick William, 15 Virginia Street, Southport.
 Blankley, Frank Ferniough, High Street, Brownhills, near Walsall.
 Blewett, William Thomas, 12 St. Clare Street, Penzance.
 Britain, John Wardell, 51 Fairfax Road, South Hampstead, London, N.W.
 Broad, Henry C., Clevedon, Somerset.
 Brooke, Samuel, Gomersal, near Leeds.
 Buchanan, Dugald, 45 High Street, Irvine, N.B.
 Burland, Walter Vincent, 196 Whittington Road, Bowes Park, London, N.
 Burnage, William Arthur, 33 Commercial Street, Newport, Mon.
 Burnett, Cornelius Chas., 189 Breck Road, Liverpool.
 Butterworth, Henry Lindsay, 175 Oxford Road, Burnley.
 Callaway, James Thomas, Ashford, Middlesex.
 Campbell, Charles, 60 Coltman Street, Hull.
 Catterall, Cuthbert Geo., Hyde Park, Leeds.
 Chambers, Fred Aldis, 7 Barton Road, Walton, Liverpool.
 Chant, Herbert Alfred, Langport, Somerset.
 Chubb, Emanuel, Bude, Cornwall.
 Church, Charles Edward, 59 West Green Road, Tottenham, London, N.
 Clark, Joseph Branch, 29 Maynard Road, Leicester.
 Clarke, Frederick, Dulverton, Somerset.
 Clifton, George Frederick, 45 Fleet Street, Bury, Lancs.
 Cole, Samuel John, Berry, Hartland, Devon.
 Cooper, William Eckles, High Street, Upton-on-Severn.
 Corney, Frank Norman, 96 Rendlesham Road, Clapton, London, N.E.
 Crawley, William Pashler, 318 Nechells Park Road, Birmingham.
 Crossley, Frederick, 9 Oxford Terrace, Willesden, London, N.W.
 Cummings, Robert, 8 Kew Terrace, Edinburgh.
 Cutting, Henry, Selby.
 Dakers, John Israel, 6 St. Thomas' Terrace, Newcastle-on-Tyne.
 Dakers, Percy Philip, 28 Harvard Road, Gunnersbury, London, W.
 Davies, Arthur Lloyd, 4 Union Street, Carmarthen.
 Davies, Robert, 490 Holdenhurst Road, Bournemouth.
 Davies, Thomas William, 67 Holborn Viaduct, London, E.C.
 Davis, Henry Baker, 34 Great James Street, Bedford Row, London, W.C.
 Douglas, James Malcolm, 38 Keptie Street, Arbroath.
 Drake, Henry Charles, 29 Langdale Road, Scarborough.

Dryden, Adam, 10 Craigie Terrace, Edinburgh.
 Duff, James, Dalswinton, Kirkmahoe, Dumfries.
 Duncan, Henry Richard, Elm Tree House, Madeley, Salop.
 Duncan, William, 65 Whittington Road, Bowes Park, London, N.
 Dunn, Tom Henry, 26 Larkspur Terrace, Newcastle-on-Tyne.
 Eastland, Thomas Nix, 105 Talbot Road, Bayswater, London W.
 Easton, John, Well Road, Moffat, N.B.
 Eaton, John, 33 Salisbury Road, Reading.
 Eaton, Tom Wilcox, 33 Salisbury Road, Reading.
 Eccles, Robert Burton, 8 Bigby Street, Brigg, Lincs.
 Edwards, Elizabeth, 13 Holly Hedge Road, West Bromwich.
 Ellis, Clement, 79 Grosvenor Road, Highbury New Park, London, N.
 Evans, Charles Henry, The Cedars, Tremont Road, Llandrindod Wells.
 Evans, Nathaniel John, Laugharne, Carmarthenshire.
 Falconer, Campbell, "Cleeve," Oxford Street, Barrow-in-Furness.
 Ferriday, Herbert John, c/o Mrs. Brown, 358 Leith Walk, Edinburgh.
 Fitch, William Bowers, New Cross Glass Works, Mornington Road, Deptford, London, S.E.
 Fitzgerald, John, 62 The Embankment, Darlington.
 Fletcher, Francis Bagshaw, 17 Adolphus Road, Finsbury Park, London, N.W.
 Flynn, William, 26 East George Street, Kilmarnock, N.B.
 Foah, William Pilcher, 6 St. John's Road, St. Leonards-on-Sea.
 Fortnam, Walter John, Union Street, Willenhall, Staffs.
 Franklin, Thomas, Leigh Croft, Fairleigh Drive, Leigh-on-Sea.
 Gale, Richard Percy, 9 Elm Tree Terrace, Hull.
 Garbett, Charles, Wigston Magna, Leicester.
 Garbutt, Charles Holmes, 87 Shields Road, Newcastle-on-Tyne.
 Garlick, John, Droylesden Road, Newton Heath.
 Geary, Edwin, "Glenfield," Headley Heath, King's Norton, Birmingham.
 George, William, 10 Oxford Street, Swansea.
 Goldstraw, Charles, Pen-y-bryn, Sedgley, Stafford.
 Goodman, Cornall, 48 Wellington Street, Gorton, Manchester.
 Graves, Joseph Waddington, 72 Caledonian Road, Leeds.
 Greenwood, John Tatam, 297 Moss Lane East, Manchester.
 Griffith, Leonard John, 24 Borough, Farnham, Surrey.
 Gross, George Franklin Cooper, 64 Roseneath Road, Urmston, Manchester.
 Grover, Frank, 12 Crofton Terrace, Brockley Road, London, S.E.
 Hall, Peter, 4 Spring Grove Terrace, Alexandra Road, Leeds.
 Hamilton, Henry, The Priory, Wymondham, Oakham.
 Harding, Christmas, 18 Exmouth Street, Clerkenwell, London, E.C.
 Harlow, Walter Thomas, 15 Dickson Road, Blackpool.
 Harris, Myers Solomon, 101 Meadow Street, Sheffield.
 Harris, William, 56 High Street, Fredworth, Gloucester.
 Harrison, James, 10 Barclay Street, Sunderland.
 Harrison, William Arthur, 61 New Hall Street, Macclesfield.
 Hawkins, John Charles, 15 Wellington Street, Wilton, Hawick, N.B.
 Henderson, Christopher, 10 The Parade, Northumberland Heath, Belvedere.
 Henry, Thomas Anderson, 29 Coulton Street, Barrow-in-Furness.
 Hill, Blair, 50 North Bridge, Edinburgh.
 Hitchin, Robert, 54 St. James's Street, Burnley.
 Hodgson, John George, Fountayne House, Haxby Road, York.
 Holloway, John, 52 Sydney Road, Hornsey, London, N.
 Holmes, John, 57 Gt. Suffolk Street, London, S.E.
 Houlton, Joseph Leighton, 71 Peel Street, Hull.
 Humble, Arthur Bawtree, 190 Upper Richmond Road, Putney, London, S.W.
 Husbands, Herbert Henry, Park Road, Lenton, Nottingham.
 Hutcheson, James Cameron, 9 Goldhawk Road, London, W.
 Hutcheson, Robert, Charleston Cottage, Inverness.
 Hutchins, Henry Charles, Framlingham, Suffolk.
 Ind, Charles Uncles, Orient Villa, St. Peter's Footpath, Margate.
 Ireland, Alfred Colman, Pokesdown, Bournemouth.
 Jardino, William Dalrymple, 54 Stratford Road, Birmingham.
 Jasper, William, 10 May Terrace, Plymouth.
 Jeffcoat, Joseph George, 13 Tooting Bec Road, Tooting, London, S.W.
 Johns, Thomas Edgar, 104 Thomas Street, Llwynypia, Glam.
 Johnson, Frank Horace, 78 Upper Tulse Hill, Brixton, London, S.W.
 Jones, Alfred Benjamin George Ernest, Pembroke House, Gt. Norwood Street, Cheltenham.
 Jones, William, Fore Street, Uffculme, Devon.
 Keightley, Joseph, High Street, Tunstall, Staffordshire.

Exchange Column—Bargains.

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SHARES.

Shares for Sale.—See p. 198.

20 £5 Preference, Evans Sons Lescher & Webb Ltd.; what offers? 254/10, Office of this Paper.

SHOP FITTINGS.

Chemist's outside lamp; also set of teeth forceps. McCONNELL, Chemist, Johnstone.

Gledhill till; scarcely used; cost £2 17s. net; will take £2 7s. TURNER, 281 Fulham Road.

Pear-shaped carboy (4 gall.); 2 specie-jars, gilt-tops; all good condition; what offers? COLLITT, Chemist, Teddington.

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MISCELLANEOUS.

Dental forceps, best; never used; 8 pairs; 35s. TURNER, 280 Fulham Road.

Splendid set plated forceps, &c., mahogany case, £3 3s. LITTLER, Chemist, Chesterton, Staffs.

Infant weighing-machine; also modern typewriter, good order. WILSON, Chemist, Stowmarket.

Dental-engine with right-angle attachment; good condition; 25s. HICKMAN, 13 Clairville Gardens, Hanwell.

Skull, articulated, cut horizontally; bleached; finest specimen; all teeth; 36s. cash. 251/101, Office of this Paper.

Wrench's incandescent spirit-lamp, good as new, with dozen mantles; price 7s. 6d., bargain. DUNMORE, Downton, Wilts.

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WANTED.

Ointment-jars, round oil bottles. 137 Landor Road, Stockwell.

Copper measures, 1 gallon upwards. 70 Wellington Road, Dudley.

Set of dental forceps, good condition; price, approval. DENTON, Chemist, Hartlepool.

Whole-plate camera, with 3 D.D. slides. B. HARRY, 65 Queen's Road, Peckham, S.E.

"Pharmaceutical Formulas," latest edition. State condition and lowest price to AMOS, Malvern Wells.

Clean C. & D. for March 30, 1901, April 6, 1901, April 27, 1901, September 7, 1901. LEE, Middlesbrough.

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Barrow, covered in, light, and in good condition. Send full description and price to McCLUMPHA, Chemist, 372 Westgate Road, Newcastle-on-Tyne.